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**SHARING BENEFITS FROM COASTAL RESOURCES WITH RURAL
COMMUNITIES IN SOUTH AFRICA: THE INFLUENCE OF
INSTITUTIONAL ARRANGEMENTS**

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**A dissertation submitted in full fulfillment of the requirements for the
award of the degree of
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COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

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ABSTRACT

Coastal resources play a significant role in supporting the livelihoods of marginalized communities in the Eastern Cape and KwaZulu-Natal provinces of South Africa. Through an analysis of three rural communities in these provinces, this research sought to understand how and why benefits arising from the use of coastal resources in the fisheries and mining sectors are shared and distributed in the manner that they are. Both qualitative and quantitative methods were used to collect the data and included 270 household surveys, 25 focus groups, and 33 key informant interviews.

Findings reveal that despite the fact that communities have benefited from fisheries and mining, these activities have also had negative economic, social and ecological impacts on livelihoods. The benefit-sharing mechanisms used by the institutions involved in using, or regulating access to and benefits from resources in the fisheries and mining sectors have significantly impacted on people's ability to benefit from coastal resource use. These mechanisms included partnerships by the state and/or private sector institutions with resource users in the communities, the setting up of local committees for benefit-sharing, as well as NGO involvement in local tourism to enhance benefits to local fishers.

The study showed that limited state involvement and conflicts with regards to the dual governance between traditional authorities and local government in rural coastal communities have curtailed the positive impacts of benefits from fisheries and mining activities. Moreover, dual governance and the lack of robust governance institutions have led to a multiplicity of actors from diverse sectors working within rural communities, largely operating in isolation.

The findings affirm that in contrast to centralized management approaches, decentralized management of fisheries resources, involving partnerships between state, non-state institutions and local fishers, may enhance benefits from resource use. It is crucial for fisheries management approaches to pay adequate attention to social and economic issues facing resource users, in addition to the consideration of resource use sustainability.

Alternative livelihood support options are crucial for the resilience of fishing communities, and may help decrease their reliance on dwindling fisheries resources.

Local power dynamics largely influenced the manner in which benefits were distributed from mining. The prevalence of unaccountable traditional authorities in rural communities is a major blockage to benefit-sharing. Findings of this study suggest that traditional authorities capture benefits without effectively distributing them to the wider community and use political patronage to determine who in the community benefits. Lack of accountability by local committees responsible for mediating benefit-sharing between the private sector and the wider communities impeded the ability of benefits to trickle down to the wider communities. These blockages to benefit-sharing were not unique to the mining sector, but were also evident within other sectors where economic benefits from high value coastal resources were involved, such as tourism. The findings of this study affirm the need for robust, representative and downwardly accountable institutional arrangements for equitable benefit-sharing of coastal resources in rural communities.

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LIST OF ACRONYMS

ANC	African National Congress
ASCLME	Agulhas and Somali Current Large Marine Ecosystem
BBBEE	Broad Based Black Economic Empowerment
BBSEEC	Broad Based Socio-Economic Empowerment Charter
BEE	Black Economic Empowerment
CBD	Convention on Biological Diversity
CDC	Community Development Council
Co-op	Co-operation
COPE	Congress of the People
CSI	Corporate Social Investment
CSR	Corporate Social Responsibility
DAFF	Department of Agriculture, Forestry and Fisheries
DEA	Department of Environmental Affairs
DEDEA	Department of Economic Development and Environmental Affairs, Eastern Cape Province
DEAT	Department of Environmental Affairs and Tourism
DME	Department of Minerals and Energy
DMR	Department of Mineral Resources
DRDLR	Department of Rural Development and Land Reform
DWAF	Department of Water Affairs and Forestry
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
GEAR	Growth, Employment and Redistribution
GGP	Gross Geographic Product
GIS	Geographical Information Systems
EKZN Wildlife	Ezemvelo KZN Wildlife
FAO	Food and Agriculture Organization
ICLARM	International Centre for Living Aquatic Resources Management
ICM	Integrated Coastal Management
ICMM	International Council on Mining and Metals
ID	Identity Document
IDP	Integrated Development Plan
IFP	Inkatha Freedom Party
LED	Local Economic Development
MCM	Marine and Coastal Management
MDGs	Millennium Development Goals
MLRA	Marine Living Resources Act 18 of 1998
MMSD	Mining Minerals and Sustainable Development
MPRDA	Mineral and Petroleum Resources Development Act 28 of 2002
NEM: ICM	National Environmental Management: Integrated Coastal Management Act 24 of 2008
NEMA	National Environmental Management Act 107 of 1998

NGO	Non Governmental Organization
NPO	Non Profit Organization
NUM	National Union of Mineworkers
PRA	Participatory Rural Appraisal
PSU	Primary Sampling Unit
QTI	Queensland Trustees and Investment
RBM	Richards Bay Minerals
RDP	Reconstruction and Development Program
SFMU	Subsistence Fisheries Management Unit
SFTG	Subsistence Fisheries Task Group
SLP	Social and Labor Plan
SMME	Small, Medium and Macro Enterprise
SNA	Social Network Analysis
WIOMSA	Western Indian Ocean Marine Science Association
TA	Traditional Authority
TAC	Total Allowable Catch
TNC	Trans National Corporation
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
YDC	Youth Development Committee

CHAPTER ONE – INTRODUCTION

1.1 Introduction

Worldwide, coastal resources such as fisheries, forests and minerals are faced with increasing pressures from globalization and contestation for use by different stakeholders (Graham, 2009). Pressures from increased coastal resource use limit and ultimately diminish access to coastal resources for coastal communities. Globalization, constituted by market liberalization, Westernization, increased consumption levels and disparities between the rich and poor, has affected various local and national economies, and as a result, it has also affected the way in which people use and rely on coastal resources (IUCN, 2000). Coastal resources are therefore faced with threats such as over-exploitation, mismanagement, degradation and pollution.

In southern Africa, coastal resources are significant in supporting the livelihoods of poor communities adjacent to the coastal zone. For example, in South Africa, the provinces of KwaZulu-Natal and the Eastern Cape have poverty levels estimated at 33% and 40%, respectively (Glavovic and Boonzaier, 2007). A significant number of poor households living along the South African coastline rely on harvesting marine, forests, and agricultural resources for subsistence use, in order to support their livelihoods (Glavovic, 2000).

Post-apartheid coastal zone policy and legislation in South Africa has been geared towards a pro-poor integrated coastal management approach in order to promote the sustainable use of coastal resources (Glavovic and Boonzaier, 2007). Many institutions ranging from government agencies to non-governmental organizations (NGOs) are involved in supporting enhanced access to coastal resources, with the objective of developing sustainable livelihood opportunities for coastal communities (Glavovic and Boonzaier, 2007).

Since the beginning of South Africa's democracy in 1994, efforts have been made to increase the participation of local communities in determining who can access, manage and benefit from natural resources. There are three spheres of government in South Africa, i.e. local (including municipalities), provincial and national. Local government consists of local municipalities established throughout South Africa, including rural areas where they previously never existed (Ntsebeza, 2006). For rural development, one of the primary aims of national government in the post-apartheid era is to decentralize decision-making power to local level governments and to improve the livelihoods of previously disadvantaged people by redressing past inequities, such as unequal access to land and resources (Ntsebeza, 2002).

Although the Constitution of the Republic of South Africa Act 108 of 1996 (Republic of South Africa, 1996) declares marine resources, and their conservation, as a national government competency, it also states that provincial and local governments may have a development role at the local level and must be democratic and downwardly accountable to local communities through public participation and promotion of social and economic development (Ntsebeza, 2006). Hence, improved participation of local people in decision-making processes is a principle that is enshrined in the Constitution and the National Environmental Management Act (NEMA) 107 of 1998, in an effort to empower local people. The National Environmental Management: Integrated Coastal Management Act 24 of 2008 (ICM Act) also adopts a holistic approach to coastal zone management in order to meet the ecological, social and economic needs of the coastal zone and its users (DEAT, 2008).

Through examining three case studies in the KwaZulu-Natal and Eastern Cape provinces in South Africa, this dissertation aims to understand how institutional arrangements influence access to coastal resources; how benefits derived from coastal resources are shared and distributed among coastal stakeholders; and why benefits are distributed in the way they are. The focus of the study is on the small-scale fishery and mining sectors within rural communities¹ along the coast of the KwaZulu-Natal and Eastern Cape provinces in South Africa.

Ribot and Peluso's (2003) 'access' theory is used to inform the theoretical basis for this study. The concept of 'benefits' is articulated both in access and property literature concerned with how people relate to each other and how they derive, transfer or distribute benefits from resources. Access is defined as "the ability to benefit from things – including material objects, persons, institutions, and symbols" (Ribot and Peluso, 2003:1). In the context of this study, 'things' refer to natural resources occurring in coastal environments. Understanding how people benefit from the ability to access natural resources is important as people, institutions and societies rely on, strive for, and compete over benefits from natural resources (Ribot and Peluso, 2003).

This chapter provides the rationale for the study, the aims and objectives, and an overview of

¹ This dissertation acknowledges that the concept 'community' is highly contested, but in this context, the term is used to refer to the common characteristics shared by the people in the respective areas that were studied, such as locality, Traditional Authority (TA) leadership and municipal structuring (Rapport and Overing, 2000).

the research objectives and the case studies communities in which this research was undertaken.

1.2 Rationale for study

This dissertation forms part of a larger research project funded by the Western Indian Ocean Marine Science Association (WIOMSA). This wider initiative focuses on contributing towards poverty reduction and sustainable resource use and management by promoting the equitable sharing of benefits derived from coastal resources generally, and more specifically, in the Western Indian Ocean region. A key motivation for undertaking this dissertation is that in coastal resource use literature, there seems to be limited understanding of the role that institutional arrangements play in mediating access to coastal resources and enabling the sharing of benefits arising from their use in marginalized and rural coastal communities. Furthermore, although it is widely accepted that the principle of equitable benefit-sharing should apply to natural resources, there is still no conceptual clarity across the various natural resource sectors and disciplines as to its meaning (Byström *et al*, 1999). The Convention on Biological Diversity (CBD) uses the concept of benefit-sharing to emphasize the significance of fair and equitable sharing of the benefits derived from genetic resources (UNEP, 1992). Most of the literature about benefit-sharing has focused on this narrow definition in the context of bio prospecting and genetic resources. This dissertation, however, adopts a broader approach, concerned with the use of, and benefits derived from, natural resources generally, and coastal resources specifically. Little evidence is found in the literature about benefit-sharing in the fisheries and mining sectors and how institutions put in place at the local level influence the way in which rural communities benefit from the coastal resources utilized in these sectors. This research, therefore, seeks to develop an understanding of how fisheries and mineral resources are used, who benefits from them, how benefits derived from the resources are shared, and what role institutional arrangements play in influencing benefit-sharing processes.

1.3 Specific aim and objectives

Aim

The aim of this study is to undertake an analysis of how institutional arrangements influence access to, and the equitable sharing of benefits from, the use of coastal resources in rural coastal communities, and the underpinning reasons for these patterns.

Objectives

Specific objectives of the study are:

- To understand coastal resource use in the fisheries and mining sectors in three case study sites;
- To identify who benefits from the use of these coastal resources;
- To identify the institutions responsible for distributing benefits and the ways in which they facilitate and/or hinder access and benefit-sharing of coastal resources;
- To determine the impact of benefit-sharing mechanisms for access, use and benefit-sharing of coastal resources;
- To determine why benefits from coastal resources are distributed in the way that they are; and
- To make recommendations for best practice to enhance access and benefit-sharing of coastal resources in the fisheries and mining sectors.

1.4 Case study sites

This research was undertaken by using a case study method. Case study research is “a research strategy that focuses on understanding dynamics present within single settings”, and combines data collection methods like interviews, questionnaires and observations to produce qualitative and/or quantitative evidence (Eisenhardt, 1989:534). Case study research is geared towards understanding why things are the way they are, and provides an in-depth and rich insight pertaining to the particular problem or phenomenon being studied (Noor, 2008). The case study sites for this study were selected from the provinces of KwaZulu-Natal and Eastern Cape. In KwaZulu-Natal, two case study communities, Sokhulu and Mbonambi, were chosen, while in the Eastern Cape, one case study community, Mankosi, was selected. Figure 1.1 below illustrates the location of the case study sites.



Figure 1.1: The location of selected case study sites in South Africa

The following criteria were used for selecting the case study communities:

- They had to represent rural and marginalized communities along the Western Indian Ocean region of South Africa;
- The small-scale fisheries and/or mining sectors had to be represented;
- Each sector within the case study communities had to incorporate institutional arrangements for access, use and benefit-sharing from the resources; and
- Case study sites had to be selected from the two different provinces in order to compare different administrative systems and institutional arrangements.

1.7 Structure of dissertation

This first chapter has provided an introduction to the study, a brief background and context of the study and case study sites, and has introduced the aims and objectives of the research.

Chapter Two describes the methods used to collect and analyze the data. Chapter Three presents a literature review and provides the theoretical and conceptual frameworks that inform this study. Chapter Four provides the background context for this study, including an overview of the history, background and legal frameworks of small-scale fisheries and coastal mining in South Africa. Chapters Five and Six describe the findings of this research, which are then analyzed and discussed in Chapter Seven. Chapter Eight concludes the study and gives recommendations for future best practice.

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CHAPTER TWO – METHODOLOGY

2.1 Introduction

This chapter describes the research approach and methods used for data collection and analysis in this study. Both qualitative and quantitative methods were used to collect data. Due to the fact that there is limited information on access and benefit-sharing of coastal resources, particularly in South Africa, this research utilized a grounded theory approach. This draws on the experiences and perceptions of the people that were studied as a fundamental basis for understanding access and benefit-sharing patterns, rather than drawing solely on the literature and other documented evidence (Kelly and Terre Blanche, 1999). In addition, household surveys, focus group discussions and key informant interviews were conducted in order to elicit that informed the findings of this study.

2.2 Research approach

Grounded theory research was first introduced in 1967, and the theory in this research is derived inductively from researching a particular phenomenon and is then developed and verified through systematic data collection and analysis of data about the phenomenon being studied (Strauss and Corbin, 1990). The general aim of this type of research is to create theories that inform the understanding of phenomena. It is thus used to generate, elaborate and validate social science theory (Corbin and Strauss, 1990; Haig, 1995). Data for grounded theory research can come from various sources, including interviews, observations, government departments and books. The grounded theory procedures are designed to generate thorough observation, generalizability, reproducibility, precision and verification of social phenomena studied; hence the theory generated from grounded theory research comes from the data itself (Strauss and Corbin, 1990). Through grounded theory, interpretive methods are used to understand the data collected as it is the experiences of people rather than prescribed theory that inform the research (Kelly and Terre Blanche, 1999).

This Masters formed a component of a wider project, and data collection for my research was dovetailed with that of the wider project. The data that informed this study was based on case studies, household surveys, focus group discussions, interviews, observations and documentary evidence. The household survey, focus group and key informant interview questions, as well as focus group methodologies were developed by myself and the research team involved in the wider WIOMSA project for South Africa and Mozambique (see Appendix 1 to Appendix 5). Due to the fact that cross-country comparisons with Mozambique

needed to be conducted, there was some standardisation of data collection approaches between the different researchers involved on the project. Hence, the questionnaire was developed by the project leaders, along with inputs from myself and other team members. However, I was almost entirely responsible for determining the sampling methods used to implement the questionnaire. Moreover, I played a central role in formulating the qualitative data collection methods and in leading the process for developing the methodology template that was adopted for the Mozambique case studies. I also led the design of the focus groups and key informant interviews, with input from the project team.

Field assistants from each community were employed and trained in order to assist with the data collection process for this research, particularly for the household surveys and key informant interviews. This was done both to benefit the communities from the research and in order to obtain a deeper insight into the different dynamics of the communities by obtaining the assistance of people who reside there. In order to gain the richness of knowledge that a grounded theory research approach offers, I was based in the three communities, Sokhulu, Mbonambi and Mankosi, between the periods of 2009 and 2010 for approximately six months during 2009 and 2010. During this time, I was accommodated in one of the villages within the communities, and obtained permission from the Tribal Councils in each of the communities to conduct the research. As a result, in Sokhulu and Mbonambi, I lived with families from the communities, partaking in their everyday activities. In Mankosi, I lived at a backpacker lodge facility which was community based and located in the vicinity of one of the villages in the community. During my stay within each community, I developed a relationship with community members and conducted observations of the behaviors and livelihoods of the communities. Due to the fact that I am fluent in isiZulu and isiXhosa, it was easy for me to develop trust and rapport with community members, as these were the languages that were spoken in the different case study communities. This enabled me to obtain a rich understanding of the people in these communities and their livelihoods.

Before and during the commencement of the household surveys in each community, I conducted several informal interviews with community members and coastal resource users, in order to understand how they used the resources and their perceptions about resource access, use and management. The local field assistants that I had trained and the families that I lived with were helpful in educating me about the history and dynamics of the communities.

Since the use of qualitative and quantitative data collection methods congruently may allow for cross validation and comparison of data, the qualitative and quantitative data generated in this study was triangulated in order to understand and interpret the information contained in the data (Jick, 1979). Triangulation can be defined as “the combination of methodologies in the study of the same phenomenon” (Denzin, 1978:291). The major strength of this analysis method is that it is able to capture a holistic portrayal of the phenomena being studied and it also enables for the weaknesses of each method used by the researcher to be countered by the strengths of the other methods, giving the researcher more confidence about their findings (Jick, 1979). Hence the use of both qualitative and quantitative methods in grounded theory research is encouraged.

2.3 Data collection and sampling

2.3.1 Household² survey sampling

A household questionnaire was drawn up for quantitative data collection for this study by the WIOMSA project team, including myself. My supervisors, who are the principal investigators in the bigger WIOMSA project, led the questionnaire design process, and the WIOMSA research team, including myself, collectively determined the questions that are contained in the questionnaire. The questionnaire comprises questions about socio-economic background, use of coastal resources, benefits from the resources, as well as questions relating to people’s perceptions about institutions and institutional arrangements responsible for distributing benefits. Questions were also asked about the perception of rules governing resources use and about benefits incurred by people due to various benefit-sharing mechanisms (Appendix 1). The analysis of the questionnaire was conducted by myself, with inputs from my supervisors and the WIOMSA research team.

Simple and stratified random sampling was used to produce an unbiased sample representative of the communities that were surveyed (Eckhardt and Ermann, 1977; Churchill and Lacobucci, 2005). Simple random sampling is used when the researcher seeks to give every population member an equal chance to be selected as part of the sample (Yamane, 1967). This sampling methodology was used in this study to determine the sample for the household surveys in the Mankosi area because the homesteads in Mankosi were all part of one geographical unit, the Mankosi Traditional Authority (TA). On the other hand, stratified

² In the context of rural communities in the KwaZulu-Natal and Eastern Cape provinces, dwelling units are referred to as ‘homesteads’, and the families residing in them are the ‘households’.

random sampling was used to sample households in Sokhulu and Mbonambi areas. Stratification is used when the studied population falls into natural or homogeneous groupings such as districts, villages or gender, etc (Eckhardt and Ermann, 1977). Stratified random sampling was used to sample homesteads in Sokhulu and Mbonambi because the two communities were adjacent to each other, and there were thus overlaps in the location of some villages belonging to each of these communities. For instance, two Sokhulu villages occur within the geographical boundaries of the Mbonambi Municipal Ward. In addition to this, both Sokhulu and Mbonambi fell into more than one Municipal Ward within the Mfolozi Local Municipality. Ward 1 of Sokhulu and Ward 3 of Mbonambi were the Municipal Wards where most of the people in these communities were involved in coastal sectors such as fisheries, mining and forestry. As a result, the villages in Wards 1 and 3 of Sokhulu and Mbonambi were used as the primary sampling units for each community. Primary sampling units (PSUs) are units selected at the first stage of stratified random sampling after the strata are identified (United Nations, 2005). The Sokhulu community in Wards 1 and 3 has 16 villages while the Mbonambi community has 16 villages in Ward 3. In the Mankosi community, PSUs were made up of the 12 villages, which together make up the Mankosi community. The second-stage units that were sampled were the households within each PSU (i.e. village). Ward 1 (Sokhulu) and Ward 3 (Mbonambi) were the coastal wards used for data collection for this study.

In order to determine the size of the sample representative of the communities, stratified random sampling for proportions was used to sample households at Sokhulu and Mbonambi, while simple random sampling was used to determine the sample size for Mankosi. Statistical assistance was obtained from the Department of Statistical Sciences at the University of Cape Town in order to determine the appropriate sample sizes for household surveys for each of the case study sites. Various steps were undertaken in order to finalize sample sizes in each case study. Yamane's (1967) simple random sampling for determining sample size and precision, as well as stratified random sampling for proportion formulas were used to determine the sample sizes of homesteads for the household surveys in each case study site (Appendix 2).

The case study communities that were chosen for this study are rural and marginalized and as a result, the relevant government departments and institutions have little information about the households found in these communities. This lack of information created difficulties in determining the sampling methodology for the household surveys. Geographical Information

Systems (GIS) and Google Earth satellite imagery of the case study areas were used to assist with the sampling strategy. Geographical Information Systems data on the different case study areas was used to identify the geographic boundaries of each case study site, and shape files of landmarks and geographical boundaries were obtained from local municipalities and the Geomatics Department at the University of Cape Town. All the homesteads within the boundaries of each case study area were marked and given a label using Google Earth imagery. Once all the homesteads identified in the Google Earth imagery were marked and labeled, their labels were entered into a Microsoft Excel sheet. Microsoft Excel was used as a tool for generating a random sample of the homesteads to be used for the study based on the predetermined sample size for each case study area. Table 2.1 shows the sample sizes for household surveys in Sokhulu, Mbonambi and Mankosi.

Table 2.1: Household survey sample sizes in the three case study sites

	Sokhulu	Mbonambi	Mankosi
Estimated number of homesteads	540	2494	800
Sample size	48	142	80

2.3.2 Focus group discussions

Focus groups, also known as discussion groups, are a key interview method for qualitative enquiry (Cloke *et al*, 2004). Focus groups are defined as a carefully selected group of people who discuss particular questions raised by the moderator. Focus group discussions were vital for this research as they provided an in-depth understanding of the more difficult issues relating to how people define benefits and the institutional arrangements currently in place for distributing benefits. These were conducted with community members involved in the various sectors. The focus group methods and settings were designed by me with the approval of and inputs from my supervisors and Participatory Rural Appraisal (PRA) literature. In the field, I used the assistance of my local field assistants to identify the appropriate participants for each focus group. Participants were identified through purposive sampling. Purposive sampling is a non-random sampling technique used to identify informants who have particular knowledge about key aspects of the research, and the researcher uses their judgment to determine who can be part of the sample based on certain characteristics (Scheyvens and Storey, 2003). Participatory Rural Appraisal (PRA) techniques were used to conduct the focus groups in all the case study communities as the communities were rural and comprised individuals with a

limited education. Tables 2.1, 2.2 and 2.3 illustrate the focus groups that were conducted in the case study communities.

Participatory Rural Appraisal techniques encourage participants from the community to actively raise views about the issue in question (Driyamedia, 1996). Conducting research using PRA techniques requires that the researcher fully engages in listening and understanding people's opinions, life experiences and traditional knowledge. This is pertinent as the community is the primary source of information about their conditions, livelihoods, needs and attitudes. The specific PRA techniques that were used in the focus groups included timelines, ranking and Venn diagrams.

Table 2.2: Sokhulu focus group schedule³

DATE	FOCUS GROUP	CODE	PARTICIPANTS
08 February 2010	Sokhulu fisheries focus group 1 – mussel committee	SFFG 1	11 members (including committee chairperson, treasurer and monitors)
08 February 2010	Sokhulu fisheries focus group 2 – line fish committee	SFFG 2	8 members (including committee chairperson, deputy chairperson and secretary)
09 February 2010	Sokhulu fisheries focus group 3 – mussel harvesters	SFFG3	13 mussel harvesters
09 February 2010	Sokhulu fisheries focus group 4 – Sokhulu fishermen	SFFG4	7 fishermen
11 February 2010	Sokhulu mining focus group 1 - Sokhulu Youth Development Committee	SMFG 1	7 members (including chairperson, deputy chairperson, and deputy secretary)
11 February 2010	Sokhulu traditional healers	SHFG	3 healers
23 February 2010	Sokhulu mining focus group 2 - Sokhulu mining employees	SMFG 2	7 mining workers (3 work at RBM, 4 work for RBM contractors)

³ In Sokhulu, seven focus group meetings were conducted, and there were 56 participants in total.

Table 2.3: Mbonambi focus group schedule⁴

DATE	FOCUS GROUP	CODE	PARTICIPANTS
12 February 2010	Mbonambi Community Trust	MMFG 1	3 members (i.e. chairperson, treasurer and co-ordinator)
16 February 2010	Mbonambi fisheries focus group 1 – line fish Committee	MFFG 1	7 members (including committee chairperson, deputy chairperson and monitors)
16 February 2010	Mbonambi fisheries focus group 2 – Mbonambi fishermen	MFFG 2	5 fishermen
17 February 2010	Mbonambi fisheries focus group 3 – mussel collectors/farmers	MFFG3	51 mussel collectors/farmers
19 February 2010	Mbonambi traditional healers	MHFG	5 healers and 3 community members
19 February 2010	Mbonambi mining focus group 2 - Mbonambi mining employees	MMFG 2	5 mining workers

Table 2.4: Mankosi focus group schedule⁵

DATE	FOCUS GROUP	CODE	PARTICIPANTS
17 November 2009	Mankosi fisheries focus group 1 – line fish committee	MFFG 1	10 members (including chairperson, treasurer, secretary and monitors)
17 November 2009	Mankosi fisheries focus group 2 – Female fishers	MFFG 2	23 female fishers (i.e. mainly intertidal resources)
18 November 2009	Mankosi traditional healers	MHFG	7 healers
19 November 2009	Mankosi tourism focus group – tourism entrepreneurs	MTFG	20 participants
19 November 2009	Mankosi Community Trust	MCTFG	4 members (i.e. secretary, deputy chairperson, administrator and vice secretary)
20 November 2009	Mankosi fisheries focus group 3 – male fishers	MFFG 3	10 fishermen and divers

a) Timelines and ranking

Timelines were an important tool used in the focus groups to understand the history of the communities and their use of resources, and the way in which they have benefited or incurred losses from resource use has changed over time. Timelines may be used to reveal important community events that occurred in the past, such as droughts, floods, forest felling, and so on. (Asia Forest Network, 2002). This helps researchers understand the present conditions and

⁴ In Mbonambi, six focus group meetings were conducted, and there were 76 participants in total.

⁵ In Mankosi, six focus group meetings were conducted for this study, and there were 74 participants in total.

behaviors of the community by acknowledging the past. Timelines may be used to collect information on trends of natural resource use by the community as well as changes in land ownership. Elders in the community are usually crucial for providing historical information in timelines. Ranking exercises were used simultaneously with the timeline exercises in the focus groups and participants were asked to rank benefits associated with each event on the timeline in order to indicate the extent of the impact of that particular event on their lives. Smiley face icons (☺) and frowning face icons (☹) were used to rank the benefits, losses or negative impacts associated with the events on the timeline.

Figure 2.1 and Box 2.1 illustrate examples of a timeline and the ranking exercises that were conducted in the focus group discussions.

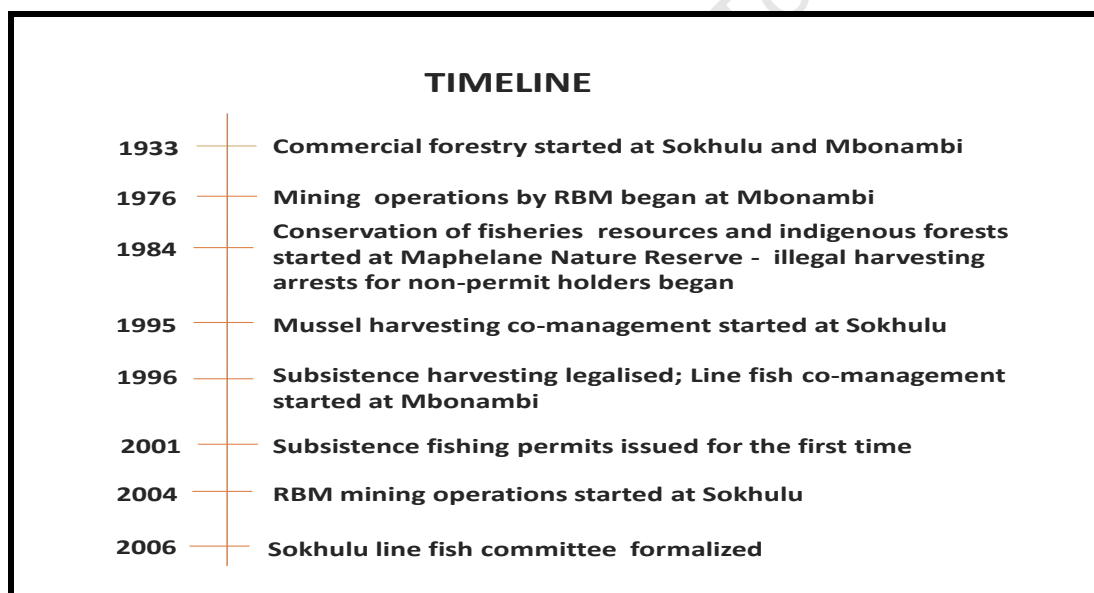


Figure 2.1: Example of a timeline of key events that have influenced the use of coastal resources in Sokhulu and Mbonambi

Box 2.1: Example of ranking of benefits and losses associated with interventions of events on the timelines in Sokhulu

Benefits from fisheries resources

- Food/subsistence 😊
- Permits from co-management 😊😊
- Jobs for monitors 😊😊
- Jobs for Coast Care workers for poor and unemployed people in the community (but the project has been terminated and we don't know why 😊😊)
- EKZNW has built a parking lot at Nhlabane beach for safety of fishermen's cars – plan is to have a boom gate where people with cars will pay and the money will go to the community – committee did this with EKZNW but no benefits to committee 😊

Losses from the fisheries sector

- Loss of free access to mussels as a source of protein 😞😞😞
- RBM bridge at lake Nhlabane decreased fish stock at the lake 😞😞😞
- We can no longer make crafts because indigenous forests were destroyed by mining 😞😞😞

b) Venn diagrams

Venn diagrams were another PRA technique used in the focus group discussions conducted in this study. Venn diagrams are used to understand the significance of actors in a given network and to depict the relationships that exist among those actors (Asia Forest Network, 2002).

Figure 2.3 illustrates an example of a Venn diagram that was conducted in a focus group discussion. The circle sizes in the diagram depict the amount of decision-making power attributed to each actor, i.e. the bigger the circle, the bigger the decision-making powers of an actor. The proximity of circles to and from each other depicts the relationship between the actors represented in each circle, i.e. the closer the circles to each other, the stronger the relationship represented, the further the circles from each other, the weaker the relationship depicted (see Figure 2.2).



Figure 2.2: An example of a Venn diagram that was conducted with coastal resource users in Mbonambi

2.3.3 Key informant interviews

Key informant interviews were used to collect primary data and as a tool to develop a rapport with the respondents in order to ensure that the data obtained was accurate and comprehensive. Key informant interviews were conducted with some of the key institutional stakeholders from the various sectors in order to understand the influence of institutions in controlling access to and benefit-sharing of resources and the mechanisms used by institutions for that purpose.

Purposive sampling was used to sample the respondents of the key informant interviews conducted in this study. This sampling strategy is adopted when the researcher uses subjective judgment about which stakeholders they want to be part of the sample that is researched, based on a prior assessment of the appropriateness of each stakeholder's characteristics for the research (Scheyvens and Storey, 2003). For this study, the key informants were predetermined by the researcher and then identified both from the communities and from key institutions

such as government departments, non-governmental organizations (NGOs) and traditional authorities. Triangulation was used to verify the data collected from the different key informants in order to provide a robust interpretation of the data.

In KwaZulu-Natal, including Sokhulu and Mbonambi, 17 key informant interviews were conducted for this study. In the Eastern Cape, including Mankosi, 13 key informant interviews were conducted for this study.

Table 2.5: KwaZulu-Natal key informant interview schedule

DATE	KEY INFORMANT	CODE	INSTITUTION/ORGANIZATION
11 February 2010	RBM representative 1	RBM 1	RBM
25 February 2010	RBM representative 2	RBM 2	RBM
25 February 2010	RBM representative 3	RBM 3	RBM
26 February 2010	KZN Regional Forestry representative	DWAF 1	DWAF
26 February 2010	KZN Regional Land Claims Commission representative	LCCKI	DRDLR
23 February 2010	EKZN Wildlife representative 1	EKZNW 1	EKZN Wildlife
25 February 2010	EKZN Wildlife representative 2	EKZNW 2	EKZN Wildlife
26 February 2010	EKZN Wildlife representative 3	EKZNW 3	EKZN Wildlife
31 October 2009	EKZN Wildlife representative 4	EKZNW 4	EKZN Wildlife
25 February 2010	Mbonambi Ward 3 Councillor	MKI 1	Mfolozi Local Municipality
01 March 2010	Sokhulu Ward 1 Councillor	SKI 1	Mfolozi Local Municipality
24 February 2010	Mbonambi Traditional Authority representative	MKI 2	Mbonambi Traditional Authority
27 February 2010	Sokhulu Traditional Authority representative	SKI 2	Sokhulu Traditional Authority
03 March 2010	Mfolozi Local Municipality representative	MLM	Mfolozi Local Municipality
02 June 2010	ASCLME Tourism representative	TKI	ASCLME
03 June 2010	EKZN Wildlife representative	EKZNW 5	EKZN Wildlife
04 June 2010	iSimangaliso Authority representative	IAKI	iSimangaliso Authority

Table 2.6: Eastern Cape key informant interview schedule

DATE	KEY INFORMANT	CODE	INSTITUTION/ORGANIZATION
27 May 2010	DEDEA representative	ECKI 1	DEDEA
27 May 2010	Eastern Cape Tourism Board representative	ECKI 2	Eastern Cape Tourism Board
28 May 2010	DRDLR representative	ECKI 3	DRDLR
27 May 2010	O.R. Tambo District Municipality representative	ORKI	O.R. Tambo District Municipality
28 May 2010	Nyandeni Local Municipality representative	NLMKI	Nyandeni Local Municipality
22 May 2010	Nyandeni Ward 26 Councillor	MKI 1	Nyandeni Local Municipality
21 May 2010	Mankosi traditional authority representative	MKI 2	Mankosi Traditional Authority
21 May 2010	Mankosi Community Trust representative	MKI 3	Mankosi Community Trust
21 May 2010	TransCape and Nyandeni Local Tourism Board representative	MKI 4	TransCape
22 May 2010	Anchorage Hotel representative	MKI 5	Anchorage Hotel
23 May 2010	Ex- MCM monitor in Mankosi	MKI 6	-
26 May 2010	Coffee Bay mussel project representative	CBMP	-
25 May 2010	Commercial lobster buyer	CLB	Phumalali seafood

2.4 Data analysis

2.4.1 Analysis of quantitative data

Microsoft Access and Microsoft Excel software were used to analyze the quantitative data contained in the household surveys. The household survey data collected were entered into a Microsoft Access database which was useful for storing the data systematically. An Access database was developed for questionnaire data from each case study site. Once all the data had been entered into an Access database, pivot tables were created using Microsoft Access and Excel in order to represent the data in graphs and tables showing frequencies and trends from the dataset about livelihoods, resource use, as well as perceptions of people about institutions and rules pertaining resource use. Various queries exploring resource use patterns, as well as perceptions on benefits and losses from the household survey data were run using this software. The queries explored relationships between variables in the database and were used to profile marine resource users in the case study sites, i.e. their average age, education level, monthly income, employment status household sizes and coastal resources they used to support their families. The queries were also used to provide statistics on community perceptions about institutions, committees and rules regulating resource use. The quantitative results that were generated were useful in supporting and verifying some of the qualitative

data from the focus groups and the key informant interviews when triangulating the data. The queries were also discussed by the research team to ensure uniformity across case studies and countries.

2.4.2 Analysis of qualitative data

Data collection and analysis in grounded theory research are interrelated processes, as analysis starts as soon as the data collection commences (Corbin and Strauss, 1990). Similar phenomena were grouped into categories in order to highlight similarities and differences and coded. Open coding was used to compare and triangulate the quantitative data from household surveys, with the qualitative data from the focus group discussions and key informant interviews.

Open coding is defined by Corbin and Strauss (1990:12) as “the interpretive process by which data are broken down analytically”. This method involves thorough examination and categorization of data, as well as comparison and triangulation of the data for similarities or differences. Comparisons of events/phenomena for similarities and differences gives researchers new insights and creative ways of interpreting phenomena contained in the data. According to Corbin and Strauss (1990), the advantage of open coding is that, through constant systematic comparisons and analysis of data, researchers are able to avoid bias and subjectivity.

To analyze the relationships and power dynamics among the various stakeholders, this research drew on the Social Network Analysis (SNA). Full SNA was not used but rather elementary SNA was utilized to understand the influence of networks between actors and the relationships among stakeholders involved in fisheries and mining in the three case study sites. The SNA method is useful in social and behavioral sciences as it focuses on relationships among social entities being studied, and on the patterns and implications of these relationships (Wasserman and Faust, 1994). It is based on an assumption of the importance of relationships among interacting units, hence, the understanding of these relationships is significant because communities are defined not just by a single group of local stakeholders, but by complex interactions of multiple stakeholders with different interests, perceptions, and amounts of influence (Wasserman and Faust, 1994; Crona and Bodin, 2006).

The principles of Social Network Analysis, according to Wasserman and Faust (1994), are as follows:

- a) Actors and their actions are viewed as interdependent rather than dependent autonomous units;
- b) Relational ties between actors are channels for flow of resources (i.e. material or non-material resources);
- c) Network models focusing on individuals view the network structural environment as providing opportunities for or constraints on individual action; and
- d) Network models conceptualize structure (social, economic, political, etc.) as lasting patterns of relations among actors.

Actors involved in each sector were asked to name/list all the people or institutions that they had a working relation with or actors/institutions that they associated with within that sector in terms of resource use or decision-making. Key actors whose names were mentioned in this exercise by individual actors were then visited and asked the same question to discover the common actors whom most of the actors in the network associate with. After that, each actor was asked to rank all the actors/institutions they had named according to who they thought had the most decision-making power. The actor ranked by most of the respondents as having the most decision-making power is at the centre of the network. The data collected in the interviews using SNA were used to determine which stakeholders were the key players within the small-scale fisheries and mining sectors in the case study communities.

2.5 Research ethics

Due to the fact that the case study communities involved in this research are rural and under the authority of traditional leadership, I had to be introduced to the tribal authority at the tribal council meetings in the respective communities. This was done in order to gain the consent of the traditional leaders and the community structures to undertake the research in each area. However, some of the household surveys were conducted during the national election period in the Sokhulu area, and due to the high political contestations in this area, some of the community members thought that the research was government led. They were therefore initially skeptical about answering some of the questions about power in the local context. In addition, there were various power dynamics that were detected between traditional authorities and community members, as well as between the different stakeholders represented in the communities (i.e. government, NGOs and the private sector) and traditional

authorities, as well as other key groups in the communities. As a result, some of the community members expressed fear of answering certain questions about traditional authorities and other stakeholders. In order to overcome these challenges, I had to maintain a neutral view and approach in the way that I communicated with the community leaders, different stakeholders as well as the wider communities; so that people would not presume that I was advocating for any sides through conducting the research. Furthermore, it was to my advantage that the assistants I had chosen to work with were not involved in community politics and were normal members of the communities. Also, the assistants were well known by many in the communities and therefore it was easy for me to build a relationship with the people and to explain to them that I was not from government but that I was conducting independent research that would make recommendations to inform government policy. Thus I encouraged people to be frank about their responses and assured them that all the information they gave was confidential. Once I had explained this, people understood and were willing to cooperate.

The research was conducted in a way that tried to ensure that the communities benefited from the research. Local community assistants were paid to assist with the household surveys and I also paid community members that accommodated me in order to give back to the community and to gain their trust by being close to them. The results and findings of this research have also been fed back to the community when the study was completed so that local organizations, and the broader community, may gain a better understanding about issues relating to benefit-sharing of coastal resources in the respective areas. This is particularly crucial as people in Sokhulu and Mankosi complained that they were tired of giving information to researchers, as they never return to inform them about the findings of their research and how they could benefit the communities. Therefore, people in the communities appreciated that I returned to the communities and presented the findings of this research and the recommendations made with the aim to improve policy practices.

2.6 Study limitations

Certain limitations were identified in this research. First, limited literature on access and benefit-sharing of natural and biological resources is available, due to the fact that much of the discourse around benefit-sharing has been within the biodiversity sector, focused on genetic resources. Second, there were translation constraints as the terms ‘benefits’, ‘losses’ and ‘access’ cannot be directly translated into the exact same meaning in isiZulu and

isiXhosa. However, this was countered by the fact that I had extensive knowledge of these languages. Third, since the case study communities involved in this research are rural, there were difficulties in obtaining information about households and population demographics of the area, making it hard to determine the sample sizes. These posed major (but not insurmountable) constraints for sampling households.

Another potential limitation was use of case studies. This approach is criticized for posing limitations with regards to the validity and replicability of the data collected (Lindegger, 1999). It has been argued that this approach is too reliant on observation and people's experiences in order to explain and understand why things are the way they are. The problem with this may be the fact that people's observations and experiences are not constant but change from time to time, making it hard to replicate or verify the research findings. Denscombe (2007) also argues that the researcher is likely to encounter doubts about the research findings when doing case study research because the extent to which the results can be generalized rests on the similarity of the case studies to other areas of comparison. Therefore, it becomes crucial for the researcher to identify how the chosen case studies compare with other areas for which the findings will be generalized (Lindegger, 1999; Denscombe, 2007).

2.7 Conclusion

This study has utilized qualitative and quantitative data collection methods in order to obtain an in-depth and broad understanding of how people in Sokhulu, Mbonambi and Mankosi access, use and benefit from coastal resources in the fisheries and mining sectors. Household surveys were conducted in Sokhulu, Mbonambi and Mankosi in order to collect qualitative and descriptive information about the communities and their coastal resources uses, benefits and losses. Focus group discussions which applied PRA techniques, as well as key informant interviews with key stakeholders provided an in-depth understanding of benefit-sharing dynamics within fisheries and mining in the respective communities. The use of PRA techniques in collecting data from the communities was useful in eliciting information about the influence and effectiveness of institutional arrangements in benefit-sharing processes, as well as issues around control and power related benefit distribution. The collected data was analyzed using coding and thematic analysis techniques, as well as through elementary Social Network Analysis. Data from different sources was triangulated during the analysis in order to provide a holistic account of how people access and benefit from the resources and how

institutional arrangements influence benefit-sharing within fisheries and mining. The next chapter provides the literature review of this dissertation.

CHAPTER THREE – LITERATURE REVIEW

3.1 Introduction

This chapter provides a review of theories relating to access to and benefit-sharing of resources. Although the Convention on Biological Diversity (CBD) asserts that benefits derived from the use of genetic resources must be fairly and equitably shared, there are various debates within the genetic resource use literature as to what ‘sharing’ actually means (Byström *et al*, 1999; UNEP, 2003). According to Byström *et al* (1999:17), fair and equitable benefit-sharing is “something that should result from the totality of legal, economic, political and other factors which decide, in combination, how benefits are divided”. This definition of benefit-sharing frames the understanding of the term within the context of this study. Ostrom (2005) asserts that when one seeks to understand institutions, it is significant to understand what they are and how they are crafted in order to determine the influence they have in various situations. In this study, Ribot and Peluso’s (2003) theory of access is thus used to understand how people gain access and control of benefits, and the various ways in which institutions and institutional arrangements influence the manner in which benefits from access and use of resources are distributed. In addition, literature on property rights and decentralization of decision-making power in natural resource management also provides a deeper understanding of the institutional underpinnings that influence benefit-sharing of resources. Literature on distributive and procedural justice, exploring the inclusiveness of decision-making processes and the distribution of power in these processes is also reviewed.

3.2 Access, rights and benefits

Ribot and Peluso’s (2003) theory of access is about how people relate to each other and how they derive, transfer or distribute benefits from resources. Within this theory, access is defined as “the ability to benefit from things; including material objects, persons, institutions, and symbols” (Ribot and Peluso, 2003:1). The term ‘use’ in natural resource use directly refers to the ability to derive and enjoy benefits from resources (Berkes, 2003). Benefits derived from coastal resources may be direct (e.g. monetary, consumptive use) and indirect (e.g. ecological goods and services such as clean air and carbon sequestration). The tourism sector, for example, is a major provider of monetary benefits to coastal areas through foreign exchange, while sectors such as subsistence agriculture and small-scale fisheries provide direct non-monetary benefits such as food that coastal communities can use to support their livelihoods (UNEP, 2007).

Access control (i.e. the ability and power to control the access of others to resources) and access maintenance (i.e. using resources or power to maintain the status quo regarding access to resources) form part of the political-economic aspect of the concept of access (Ribot and Peluso, 2003). These concepts explain how resources are harvested, used and managed, and the relations between those who control and maintain access to resources. The term 'mechanisms' may be used to refer to the various processes and relations that influence how stakeholders gain, control and maintain access to resources, how benefits derived from resources are distributed and why they are distributed in that manner (Ribot and Peluso, 2003; Langridge *et al*, 2006). According to Ribot and Peluso (2003), access mechanisms include rights based access as well as structural and relational mechanisms of access. These mechanisms are defined below.

Rights-based access may include legal, illegal and customary means of access to land and natural resources. Legal access is granted by government or other stakeholders through permits, title deeds or licenses, also referred to as property rights. The term 'property' is defined by MacPherson (1978:17) as "a right in the sense of an enforceable claim to some use or benefit of something". Property rights theory focuses on 'rights' enforced by custom or law as a fundamental basis for acquiring benefits from things. Property rights afford those who hold them the enjoyment of power and benefits that are more secure than those who do not. If resource users hold a right of access to a resource, they have power to use the resource and benefit from using it (Schangler and Ostrom, 1992). Four property rights regimes have been characterized by Schangler and Ostrom (1992). These include open access rights (i.e. where there is free and open access to a resource due to a lack of explicit property rights), private property rights (which are used to limit the use of a resource to those vested with the power to do so), communal property rights (held by a definable community which has the right to use resources in a defined area and exclude outsiders from using the resource), and state property rights (held by the state which makes decisions about resource access and exploitation) (Schangler and Ostrom, 1992).

In contrast to the property rights theory, Ribot and Peluso (2003) emphasize 'ability' (or power) as a means of understanding how benefits to things are acquired. The emphasis on 'ability' instead of only 'rights' when seeking to understand factors that enable or hinder people from benefiting from resources, is the key distinction between access and property notions and it allows for a deeper comprehension of both social and legal factors that

influence how people benefit from resources (Ribot and Peluso, 2003; Langridge *et al*, 2006).

Illegal access may refer to the enjoyment of benefits from natural resources in ways that may not necessarily be acceptable by law, but that may be acceptable within a local social context (Schangler and Ostrom, 1992). This arises in cases where communities consider it their indigenous 'right' to access natural resources. In the fisheries sector in South Africa for instance, conflicts have resulted between fishers who have been denied their traditional right to harvest marine resources, as the state declares harvesting without permits as illegal and not recognised by law (Hauck, 2008). This indicates that defining legal and illegal access to natural resources is an issue of power between stakeholders that use or manage the resources.

Under customary law, in most rural communities in Africa where land is communally owned, usufruct rights over communal land for residential, agriculture or other uses are allocated by traditional authorities (Devereux, 1996; Maxted, 2002). However, the allocation of rights to access land and resources through traditional institutions does not guarantee that the allocation process will be free from inequity and patriarchy, as traditional customs pertaining to decision making in rural communities are highly influenced by power and gender (Devereux, 1996; Maxted, 2002). In most rural communities in Africa, for instance, gender relations mostly regulate how usufruct rights are issued, as customary laws for allocating usufruct rights to land mostly favor men as they are perceived to be more productive, while women usually secure access to land through association with a male counterpart, either through marriage or family relation (Maxted, 2002).

Structural and relational mechanisms of access portray how the ability to benefit from resources may be limited by certain cultural and political-economic spheres within which access to benefits from resources occurs (Ribot and Peluso, 2003). Authority, social status, knowledge, capital and power are examples of structural and relational mechanisms that determine who has the power or ability to benefit more from natural resources than others (Ribot and Peluso, 2003). For example, a company mining sand dunes along the coast can use financial capital to facilitate its ability to gain, control and maintain access to the resource by leasing out the portion of land where the mining will take place or by obtaining legal mining rights from the state which will enable them gain control over how that portion of mining land will be used.

Framing access within a wider political-economic lens is thus crucial in understanding how people benefit from natural resources and why benefit flows occur in a certain manner within a given context. Indeed, as confirmed by Ribot and Peluso (2003), the distribution of benefits occurs in a manner that is unique to a certain context and there is no prescribed or generic approach for determining access mechanisms within a specific political-economic context. Therefore, once the benefits from resources are known, access analysis is necessary to identify mechanisms driving benefit flows and distribution, as well as to empirically determine and map how access to those benefits is gained, maintained and controlled within a study context (Ribot and Peluso, 2003). This notion forms the central focus of this dissertation.

Understanding how people benefit from the ability to access natural resources is important as people, institutions and societies rely on, strive for, and compete over benefits from natural resources (Ribot and Peluso, 2003). The theory of access is pivotal in that it utilizes a grounded and pragmatic approach to analyzing *who* benefits from resources, *what* resources they benefit from, in *what* circumstances they benefit, *how* they benefit from natural resources and *why* they benefit in that manner (Ribot and Peluso, 2003). The theory of access also enables an understanding of why certain people and (or) institutions benefit from natural resources in the way they do. This theory provides a more comprehensive understanding of the multiple ways in which people benefit from natural resources, with property rights being one of them (Ribot and Peluso, 2003). This is because theory of access encompasses all social, institutional, political-economic and discursive factors that influence the ways in which benefits from resources flow and are distributed (Ribot and Peluso, 2003).

3.3 Institutional factors relating to benefit-sharing

Due to the fact that the 'ability' to access resources relates to power, the concept of access is also akin to decision-making (McDermott, 2009). Access to natural resources and decision-making indicates and explains the ways in which benefit flows take place. The degree to which decision makers involve resource users in deciding how benefits are shared determines the power relations between institutions and resource users (McDermott, 2009). Institutions can be defined as systems for enforcing established rules and norms that structure society, while organizations are structures (such as industries and companies) made up of different actors with common or conflicting objectives (North 1990; North 1994; Hodgson 2006). Policies, principles, regulations, rules and arrangements are institutional mechanisms used by

organizations managing natural resource use and access. According to Umali (2009:5), formal and informal institutions exist as “distinct frameworks of rules for doing things”, implemented through organizations to produce, reproduce and reinforce social relations. For example, while fisheries authorities may develop and enforce rules for natural resource use through allocating permits and licenses, local people in a given area can also define their socially acceptable rules for using the resources, separate from legal rules. (ICLARM, 1998). Understanding the mediating role of institutions in marginalized people’s access to natural resources is pivotal when seeking to understand how benefits from natural resources are distributed among stakeholders (Mearns, 1995; Ribot and Peluso, 2003).

In natural resource management, institutions are responsible for making operational rules (i.e. rules that constrain or enable individuals’ choices or actions) and collective choice rules (i.e. rules made collectively by a group that shape collective choices) (Acheson, 2006). Institutional rules can also create entitlements to authorized resource use and shape decision-making and public participation in natural resource governance (Acheson, 2006; Paavola, 2007). The institutional rules that enable this include: a) entitlement rules (which are significant in influencing the distribution of benefits from resource use); b) monitoring rules (which determine who and what is being monitored); and c) decision-making rules (which largely determine the extent of procedural justice in resource governance as they are used to determine who can participate in decision-making processes and whose concerns are recognized in decision-making procedures) (Paavola, 2007). The formulation of these rules has profound implications for distributive and procedural justice, and for judging the legitimacy of institutions.

Establishing rules is critical for managing common property resources and ensuring their long term sustainability (Acheson, 2006). Coastal resources (such as intertidal resources, line fish, and estuarine resources) are often classified as common-pool or common property resources. The term ‘common-pool’ was first adopted from Hardin’s (1968) publication “The Tragedy of the Commons”. This means that the resources can be used by large numbers of people and usually become exploited when more and more people use them (Acheson, 2006). The governance functions of institutional arrangements in common property resource management are generally to exclude unauthorized resource users, to regulate authorized resource use and the distribution of benefits from resource use, to monitor, to enforce, to resolve conflicts and, to enforce collective choice (Paavola, 2007). These functions are organized differently in

different institutional arrangements. In cases where customary common property rights prevail, such as in rural areas, local institutional arrangements such as a community fisher association may make, enforce and be involved in decision-making procedures relating to the resource (Paavola, 2007). In addition, resource users or community members may themselves take part in governance functions by monitoring compliance with resource use rules.

The challenge of managing common property resources is referred to as a collective-action problem and there is no one institutional arrangement that can be used to solve it (Acheson, 2006). Ribot *et al* (2008) state that institutions enforced through rules or authorities are not merely organically occurring solutions to collective action problems, but are created by powerful interests. In recent decades, many institutions have been created for increasing public participation and empowerment in decision-making processes. Historical and contemporary studies on common property resources indicate that institutional arrangements and resource management mechanisms are perceived by resource users as the key enablers of the distribution of benefits derived from natural resources (Agrawal, 2001). Furthermore, due researchers and proponents of democracy around the world have been promoting greater public participation of local people in decision-making processes, and the discourse of decentralization in natural resource management has, since the 1980s, influenced some governments in developing countries to transfer decision-making powers and responsibilities to local level institutions (Agrawal and Ribot, 1999; Ribot, 2003).

Decentralization is a mode of governance that is defined as the transfer or devolution of decision-making power and authority for public functions from central government to subordinate governments, through enabling lower-level actors to exercise some level of autonomy in decision-making processes (Agrawal and Ribot, 1999; von Braun and Grote, 2000; Ntsebeza, 2002). Decentralization is intended to increase public participation in local decision-making processes in order to promote more equitable and efficient local management forms (Ntsebeza, 2002; Ribot, 2003). Political or democratic decentralization is a type of decentralization whereby decision-making powers are transferred to authorities that are accountable to and represent local citizens (Agrawal and Ribot, 1999; von Braun and Grote, 2000; Ntsebeza, 2002). Institutional structures with real powers that are downwardly accountable to local people on the ground arguably produce decentralization leading to local efficiency and equity (Ntsebeza, 2002; Ribot, 2003). An understanding of the powers of the involved actors, the realms in which they exercise their powers, and the extent to which they

are accountable are important prerequisites to determine whether meaningful decentralization has taken place (Agrawal and Ribot, 1999).

Understanding how institutions are designed to influence the ways in which people use and benefit from natural resources is important because of the deeper socio-political processes that shape both these institutions and the communities within which they exist (Blair, 2000; Cleaver, 2002). Power is a significant factor impacting on the ability of people to benefit from natural resources and is manifested in the ability of certain stakeholders or institutions to influence how others benefit from a resource (Ribot and Peluso, 2003). Power is constituted in different mechanisms, processes and social relations and is held by certain people and institutions who control and (or) maintain access to natural resources (Ribot and Peluso, 2003). Agrawal and Ribot (1999) assert that there are four broad types of powers that are significant in understanding decentralization in natural resource management. These include the power to create rules and to adjust old ones, the power to make decisions about how a particular resource or opportunity is to be used, the power to implement and ensure compliance to new and modified rules; and the power to judge disputes arising in efforts to create new rules and ensure compliance (Agrawal and Ribot, 1999). Successful decentralization of power occurs in part where there is transparency between institutions responsible for the governance of natural resources and local communities, as this allows for the transfer of power to take place.

Ostrom (2005) highlights eight key principles determining the robustness of institutions for sustainably managing resources. Some of these principles are: clearly defined resource boundaries and rights of resource users, ensured proportional equivalence between benefits and costs, the enforcement of collective-choice arrangements, as well as local monitoring of resources and resource use by locally accountable institutional arrangements. Ostrom (2005) notes that it is important that the rights of resource users are well defined and that resource users are included in decision-making about resource use. This makes resource users more willing to comply with resource use rules. Furthermore, if benefits and costs from resource use are equitably distributed by institutions, fairness is enhanced and resource users are more willing to abide to rules (Ostrom, 2005). Failure of institutions to take into account the abovementioned principles may negatively implicate on the robustness of institutional arrangements and may make benefit distribution processes to be susceptible to corruption, unaccountability and lack of equity on the ground (Ostrom, 2005).

3.4 Justice and equity

Literature on distributive and procedural justice, exploring the inclusiveness of decision-making processes and the distribution of power in these processes, provides a deeper insight on equity in benefit-sharing processes. Historically, natural resource decision-making was founded purely on scientific or technical evidence, disregarding the potential role of public participation as significant in influencing natural resource management. As a result, there has been inadequate literature addressing justice issues in relation to public involvement in decision-making processes relating to natural resource use (Lawrence *et al*, 1997). However, in the second half of the 20th century, there has been a strong recognition for including public participation and justice elements into natural resource decision-making.

Historically, justice research used to focus mostly on distributive justice, i.e. the perception that “people’s feelings and behaviors in social interactions flow from their assessments of the fairness of their outcomes when dealing with others” (Tyler and Blader, 2003:350).

Distributive justice focused on equity (i.e. people should be rewarded according to their efforts), need (i.e. people should receive benefits according to their needs) and equality (i.e. everyone must benefit equally, irrespective of efforts or costs) (Smith and McDonough, 2001). However, the focus on distributive justice shifted in the 1980s and early 1990s, as researchers shifted towards a stronger focus on procedural justice. According to Lawrence *et al*, (1997:579), procedural justice is based on the assumption that people involved in decision-making processes and procedures used to arrive at decisions “are significant determinants of satisfaction separate from the effect of outcomes”. This means that if participants view a procedure as fair, dissatisfaction will be low and if the participants view the procedure as unfair, dissatisfaction results. Procedural justice is primarily concerned with who is recognized and can participate in decision-making processes and with how power can be effectively distributed (Paavola, 2007).

According to Lavenenthal (1980), there are six rules that determine the fairness of a procedure, i.e. consistency of decisions, limited bias of decision makers, accurate and informed decision-making, modifiability of errors, strong representation of affected individuals in decision-making processes and, consideration for prevailing ethical and moral standards. Lawrence *et al* (1997) also add that the perceptions of procedural justice are linked to acceptance and levels of compliance with decisions by participants, as well as the confidence of people in decision makers.

Thibaut and Walker (1975), who were the pioneers of procedural justice in the early 1970s, saw procedural justice as focused on decision-making mechanisms (i.e. formal procedures) and about allocating decisions outcomes (Lawrence *et al*, 1997; Tyler and Blader, 2003). In addition to this the value in procedural justice lies in its ability to assist decision makers in making equitable decisions and judgments. However, over the years, the focus of procedural justice has shifted away from focusing only on decision-making towards focusing also on the agents of decisions, i.e. the quality of interpersonal treatment, as people interact with one another in procedures. Later research strengthened this notion by revealing that people tended to find a procedure to be fair and equitable if they felt that authorities took their arguments into account or if they were given an opportunity to have a voice in a procedure, even if what they had to say had little influence (Tyler, 1987; Lawrence, *et al.*, 1997; Tyler and Blader, 2003). Therefore, it is argued that public participation and accountability of representatives are essential for efficient and equitable distribution of benefits from resource use (Agrawal and Ribot, 1999). Hence, people tend to have a strong regard for whether or not the decision-maker treats their argument with respect. This, together with the provision of feedback to participants on decisions by decision makers and the quality of how decisions are justified, are said to be the key defining elements of fair procedures (Lawrence *et al*, 1997; Tyler and Blader, 2003).

The conclusion reached from this discussion is that although public involvement has the ability to influence decision-making processes and outcomes, the opportunity to have a voice or to speak out ones thoughts in a procedure has a more paramount value to people (Tyler and Blader, 2003). Overtime, it has become apparent that procedural justice and distributive justice are interrelated in practice especially in natural resource decision-making, as natural resources are usually limited and therefore difficult to be equally distributed to everyone (Paavola, 2007). Smith and McDonough (2001) argue that because natural resource decision makers are faced with the task of allocating benefits (and costs), high procedural fairness and high distributive fairness of decisions and outcomes are significant as they increase the level of trust that people have in decision makers and the policies they make. Research conducted both on distributive justice and procedural justice judgments in the late 1990s and early 2000s revealed that procedural justice has a greater impact in influencing people's reactions and personal experiences because people find more value in being able to express their judgments about the fairness of procedures than distributive justice concerns (Tyler and Blader, 2003).

Hence, the reflection of both distributive justice and procedural justice concerns forms the basis for legitimate decision-making in natural resource management.

3.5 Conclusion

Since the meaning of benefit-sharing is still contested, this study has drawn extensively on Ribot and Peluso's (2003) theory of access, as it provides insight on how people benefit from 'things', which may include natural resources. Due to the complex nature of common pool resources, theory of access provides a useful theoretical approach for framing the underpinnings of this study by focusing on *who* benefits from resources, *what* resources they benefit from, in *what* circumstances they benefit, *how* they benefit from natural resources and *why* they benefit in that manner (Ribot and Peluso, 2003). Furthermore, complementing the theory of access with elements of procedural justice enables an in-depth understanding of the equity of decision-making processes by institutions with regards to benefit-sharing processes, and facilitates enquiry into why certain people and (or) institutions benefit from natural resources in the way they do. The next chapter provides a detailed background and context for the study.

CHAPTER FOUR – BACKGROUND AND CONTEXT OF STUDY

4.1 Introduction

Coastal resources play a significant role in supplementing the lives of rural coastal communities in South Africa, as a significant number of poor households living along the coast harvest fish, forest products, and agricultural resources for subsistence and commercial use (Glavovic, 2000). Understanding the context of governing institutions in rural areas in South Africa is significant, as institutions impact on the manner in which rural people access and benefit from resources (Ntsebeza, 2002). Institutional arrangements for benefit distribution within coastal resource use sectors impact on opportunities for coastal communities to benefit from resources, either by enhancing or hindering benefit-sharing (Glavovic and Boonzaier, 2007). Post-apartheid coastal zone policy and legislation in South Africa has been geared towards a pro-poor integrated coastal management approach in order to promote the sustainable use of coastal resources (Glavovic and Boonzaier, 2007). Since 1994, natural resource governance has been going through a unique form of decentralization in various areas in South Africa (Ntsebeza, 2004). The reform to governance introduced by decentralization is re-shaping institutions managing natural resources, by increasing the participation of local communities in determining who can access, manage and benefit from natural resources (Agrawal and Ribot, 1999). This chapter provides an overview of the role of traditional institutions in rural coastal communities in South Africa as overarching governing institutions. It also reviews the role of small-scale fisheries and coastal mining sectors in these communities.

4.2 Governing institutions in rural areas of South Africa

The case study sites in this study were selected in part to understand the influence of institutional arrangements on access and benefit-sharing of coastal resources. They all represent rural and marginalized coastal communities residing on communal land under Traditional Authority (TA) leadership. The TAs, established by the former apartheid government, have had a significant institutional impact in former Bantustans or homeland areas in South Africa. (Koelble, 2005). Although traditional authorities are not directly involved in the management of coastal resources in these communities, South Africa's historical context needs to be taken into account in order to understand the role of TAs as overarching governing institutions.

Traditional institutions in South Africa are found mostly in the provinces with former Bantustans or homeland areas, i.e. KwaZulu-Natal, Eastern Cape, Free-State, Limpopo and Mpumalanga (Koelble, 2005). Proponents of traditional leadership institutions (also known as traditionalists) argue that the institution of traditional leadership in South Africa has had a stabilizing influence in rural areas, helping to provide continuity of governance during the transition to democracy, as the South African post-apartheid government played an inadequate role at the local level during this time (Beall, 2005). However, those opposed to traditional leadership (i.e. modernists) argue that the re-assertion of TA powers in rural areas is a threat to democratic decentralization efforts made by the post-apartheid South African government. Both traditionalists and modernists agree that TAs and elected government leaders in rural areas are competitors for political power and legitimacy (Logan, 2008).

During the apartheid era, TAs in South Africa were given land administration roles and had uncontested powers in rural areas, but were unaccountable and undemocratic (Ntsebeza, 2002). Although TAs are re-asserting their power in rural areas at institutional and informal levels, the type of power and authority that they exert is not the same throughout South Africa, varying greatly according to context (Koelble, 2005). The democratic South African government has made efforts to decentralize local government, land ownership and administrative powers to local level institutions that are accountable to the public. The Municipal Structures Act (117 of 1998) and the Municipal Systems Act (32 of 2000) were developed by the post-apartheid government in order to dissolve TA powers in rural areas in the democratic dispensation (Koelble, 2005). Although these laws have been critical in promoting democratic decentralization in rural South Africa, the government has gone against its own efforts by simultaneously uplifting TA power instead of weakening it, through the Communal Land Rights Act (11 of 2004) and the National House of Traditional Leaders Act (22 of 2009), which give traditional leaders administrative powers both at provincial and local levels (Ntsebeza, 2002; Koelble, 2005). This is because the democratic South African government has recognized TAs as being prime customary institutions in rural areas, and has displayed ambiguity in clarifying the roles, functions and powers of TAs in the local government sphere. This is also partly due to the fact that in the negotiations that led to democracy, the role of TAs in rural areas was never settled (Ntsebeza, 2002).

Although both the institutions of TAs and democratically elected local authorities (such as elected councilors) in rural areas are embedded in the Constitution, there are great tensions

and conflicts between them and elected authorities in rural areas, affecting the implementation of development policies and laws (Ntsebeza, 2006; Glavovic and Boonzaier, 2007). There remains a challenge in reconciling hereditary traditional leadership and democratic government leadership. Where land tenure reform is concerned, for example, TAs in South Africa seek to own all common property land in rural areas. The dual governance dilemma in rural South Africa between TAs and local government structures was exacerbated by the White Paper on Local Government issued by the government in 1998, as it stated that the institutions of traditional leadership should play a role that is close to the people, linking government departments to local communities (Ntsebeza, 2002). This opposed the objectives stated in the 1994 Reconstruction and Development Program (RDP) that gave this mandate to elected local government structures (Ntsebeza, 2002).

Consequently, TAs, especially in the province of KwaZulu-Natal, are opposed to most notions of democracy and decentralization in rural areas introduced by the African National Congress (ANC)⁶-led democratic government, as they feel that this will threaten their jurisdiction. In addition, TAs are opposed to other forms of alternative, potentially competitive, local institutional arrangements as they would potentially compete. Hence, Ntsebeza (2002) asserts that TAs would prefer power to be concentrated in their hands, as during the apartheid era. The institution of traditional leadership has been criticized for being both anti-democratic and non-democratic as it places individual interests ahead of community interests, and thus impedes the development of a democratic and just society (Logan, 2008).

The prevalence of TAs can therefore be regarded as one of the main blockages to democratic decentralization in rural South Africa (Ntsebeza, 2002). The inability of the South African government to make clear the roles, powers and functions of TAs in local government has negative implications for decentralization. The promulgation of the Traditional Leadership and Governance Framework and the Communal Land Rights Acts of 2004 saw the South African government resort to partnering with traditional leaders in development by formalizing the status of TAs. This was done by giving TAs and local government dual responsibilities for administration and land allocation within rural areas (United Nations Economic Commission for South Africa, 2007). This, however, has left rural coastal communities in most of South Africa confused about the roles, responsibilities and mandates

⁶ The African National Congress (ANC) is the leading political party in South Africa.

of TAs, local municipalities, local councilors, and sometimes NGOs. These functions are also often poorly defined and communicated. This problem is argued by Ntsebeza (2006) to be the source of confusion and tensions in the governance of rural communities. The lack of support by the South African government to elected local councilors in rural areas, as well as the indecisiveness of government regarding the TAs role within the democratic dispensation leaves the situation of institutional governance in rural areas in a state of confusion and consequently leads to compromised democratic decentralization (Ntsebeza, 2004). As a result, the ability of people residing in rural areas to choose their own leaders and representatives is paralyzed. Koelble (2005:9) thus argues that, “the failure of the state to touch the lives of rural citizens and the concomitant failure of the democratically elected but ineffective local authorities has opened up several spaces for traditional leaders to re-affirm their cultural, social, economic and ultimately political power in all sorts of manners”.

Understanding the context of governing institutions for rural areas in South Africa is significant, as the presence of traditional authorities in parallel to government and private sector structures has a profound impact on the manner in which rural people access and benefit from resources (Ntsebeza, 2002). In coastal areas where common pool resources occur and several activities involving the use of these resources take place, i.e. fishing, and mining, the inability of the South African government to clarify the roles of TAs, in the midst of other government and private sector institutions responsible for using or managing the resources, may lead to conflicting jurisdictions which may negatively impact on access to resources and the equitable distribution of benefits. The following sections focus on the small-scale fisheries and mining sectors in South Africa, as these are coastal sectors that are managed by government and private sector structures, in parallel with traditional institutions in the case study communities.

4.3 Overview of the small-scale fisheries sector

4.3.1 Introduction

There is no universal definition for small scale fisheries. However, according to the FAO (2005:4), small scale fisheries are defined as:

a dynamic and evolving sector employing labor intensive harvesting, processing and distribution technologies to exploit marine and inland fishery resources. The activities of this subsector, conducted full or part-time, or just occasionally, are often targeted at supplying fish and fishery products to local and domestic markets, and for subsistence consumption.

The small-scale fisheries sector has not only influenced policies and discourses on biodiversity conservation, and environmental and resource sustainability, but it has also influenced those focused on rural planning, poverty alleviation, food security, trade and sustainable livelihoods (Dey and Kanagaratnam, 2008). As a result of this, fisheries discourses have evolved from just focusing on international fishery production and trade, to recognizing small-scale fisheries as a key sector in contributing to poverty alleviation and food security in developing countries (Béné, 2006).

Although there is limited knowledge about the actual contribution of small scale fisheries in benefiting the economies of poor coastal communities in developing countries, it has been argued that small scale fisheries act as a ‘safety net’ for rural fishing communities in developing countries in times of economic adversity, harvest failure and other circumstances that lead to vulnerability (Allison and Ellis, 2001; FAO, 2005). Poverty reduction and food security in small-scale fishing communities are highly dependent not only on the benefits the fishers obtain from the resources, but also on other alternative basic services provided to supplement the livelihoods of the fishers (Jentoft *et al.*, 2010). Fisheries institutions, which aim to enhance benefits from marine resources, are shifting towards decentralized and context- specific management practices, such as co-management, in order to facilitate the implementation of management policies and to account for issues of poverty and food security (Jentoft *et al.*, 2010). The prominence of the sustainable development discourse in the late 20th century internationally and locally has also triggered a shift towards the appraisal of the socio-economic role played by small-scale fisheries in supplementing people’s livelihoods. In the South African context, the human dimension of the fishery system in small-scale fishing communities is not well understood because historically, fisheries management largely focused on ecological and economic goals, with little regard for people’s livelihoods (Hauck and Sowman, 2003; Glavovic and Boonzaier, 2007; Hauck, 2008). This section provides an in-depth account of the small-scale fisheries sector in South Africa, including the policies and laws governing resource use, as well as benefits and losses incurred by resource users within this sector.

4.3.2 Fisheries policy and legal reform in post-apartheid South Africa

According to Sowman (2006), the term ‘small-scale’ is widely accepted in South Africa for describing low technology and labor intensive fishing practices. Many small-scale fishers utilize simple fishing technologies with low capital inputs, mostly because they lack access to infrastructure and resources. The colonial and apartheid eras in South Africa were marked by pervasive patterns of racial and social inequalities, denying ‘non-white’ South Africans (i.e.

black citizens) access to, use of, and ownership of natural resources along the coast (Hauck and Sowman, 2001; Harris *et al*, 2007). For decades under the apartheid government, fisheries policy and legislation in South Africa focused only on the recreational and/or large scale commercial fisheries sector. Black fishers were excluded from participating in commercial fishing as they had neither capital nor equipment to fish commercially, and consequently a few large companies, owned by the wealthy white businesses, dominated the quota distribution of Total Allowable Catch (TAC). The exclusion of small-scale fishers from accessing formal fishing rights marginalized the small-scale fisheries sector, forcing many of these fishers to resort to ‘poaching’ in order to sustain their livelihoods (Hauck *et al*, 2002; Harris *et al*, 2007).

The Marine Living Resources Act (MLRA) 18 of 1998 was formulated in order to redistribute fishing rights to previously disadvantaged communities, as a response to the severe social and economic issues facing these fishing communities (Witbooi, 2006). The post-apartheid government sought to respond to the frustrations that were increasingly becoming expressed by many poor coastal communities against the past inequities they had suffered under the apartheid government. A suite of new fisheries and coastal zone policies were thus developed, intended to uplift communities by providing them better access to coastal resources (Hauck and Sowman, 2003; Sowman, 2006). The rights discourse in the fisheries sector was enforced by the new Constitution of South Africa (Act 108 of 1996) and the Bill of Rights, introducing a new human rights-based dispensation in order to promote equitable access to natural resources and public involvement in decision-making processes (Hauck and Sowman, 2001; Witbooi, 2006).

In 1998, the MLRA recognized ‘subsistence’ fisheries as a formal sector for the first time, enabling fishers to formally (i.e. legally) harvest marine resources. Fisheries policy and decision-making processes had previously overlooked the rights of small-scale fishers as *bona fide* fishers (Isaacs, 2006). Thus, the role of the South African fisheries authority under the MLRA was to ensure that the principles of equity and sustainability enshrined in the MLRA were realized (Isaacs, 2006; Witbooi, 2006).

In order to allow for the inclusion of small-scale fishers in the formal fishing sector, the designated fisheries authority at the time, Marine and Coastal Management (MCM)⁷, assigned

⁷ Since the 2009 national elections, MCM became the Department of Agriculture, Forestry and Fisheries (DAFF) Branch Fisheries.

a Subsistence Fisheries Task Group (SFTG) to produce guidelines to assist in the management of subsistence fisheries. Co-management was highly recommended by the SFTG as a mechanism that would enable the re-incorporation of subsistence fishers into the formal sector, and was thus promoted by the national fishing authority to be implemented as a small-scale fisheries management approach (Branch *et al.*, 2002; Sowman, 2006). Co-management is an approach that has been implemented worldwide and is defined as a partnership between government, resources users and other relevant stakeholders (Hauck and Sowman, 2001; Hauck and Sowman, 2003).

In South Africa, various forms of rights have been implemented in coastal communities for small-scale fishers to gain access to resources. This includes rights such as subsistence permits, exemption permits, and in the Western and Southern Cape provinces, 'interim' permits. A variety of 'tools' that have been used to allocate rights, and co-management has been rarely used as mechanism to distribute rights, except in KwaZulu-Natal, as it is the only province where co-management has been robust enough to establish criteria for rights and then implement permits. Permits are a tool for distributing benefits from the fishery, and co-management arrangements are the enabling mechanism for this. Co-management and community based approaches to small-scale fisheries management have been promoted worldwide to maximize benefits from small-scale fisheries to poor fishing communities through developing management strategies that are context specific and that can meet the needs that are specific to the community in question (Dey and Kanagaratnam, 2008). It involves collaboration and power sharing between government and local communities in efforts to enhance benefits from the fisheries sector through improved access to and the sustainability of the resource attained through participatory management (Jentoft, 2000; Hauck, 2001; Harris *et al.*, 2003). Where co-management is successfully implemented, it results in benefits such as participatory democracy, efficient resource management, as well as improved resource availability and sustainability (Hauck and Sowman, 2003).

Marine resources are a national competence under the Constitution of South Africa. In KwaZulu-Natal, the nature conservation authority, Ezemvelo KZN Wildlife (EKZN Wildlife), was mandated by national government to implement co-management in small-scale fishing communities through forming co-management committees with local fishers to manage fisheries resources. In the Eastern Cape Province, committees were established through the Subsistence Fisheries Management Unit (SFMU) established by MCM to carry out co-management, and set up co-management structures within the locally identified fishing communities. The SFMU subcontracted a company to appoint extension officers to identify

traditional fishing communities in the Eastern Cape coast and to assist with the implementation of the subsistence fisheries program. The SMFU also appointed environmental officers within regions to assist the extension officers with distributing permits to identified fishers in the fishing communities (Raemaekers, 2009). However, co-management of small-scale fisheries resources in the Eastern Cape did not materialize as in KwaZulu-Natal. This was because in KwaZulu-Natal there was devolution of power by national government as co-management was institutionalized within EKZN Wildlife, and the policy was developed to guide the implementation of co-management. This did not materialize in Eastern Cape, and therefore, co-management has never been effectively implemented.

However, it is argued that many small-scale fishers continued to be marginalized even after the MLRA was promulgated as they did not necessarily fit neatly into the commercial, recreational or subsistence sectors outlined in law as they harvested mainly to sell, but at a small-scale that did not fall into the 'commercial' category (Sowman, 2006; Raemaekers, 2009). This meant that there was no recognition by the law that these small-scale fishers that did not solely fish for consumption, but also sold their catch on a small-scale commercial basis as well. Another loophole in the MLRA was that small-scale fishers that were involved in small-scale commercial fishing such as in the Eastern Cape, were issued with individual 'exemption' permits that enabled individual fishers to harvest a specific type of resource. This did not take into account the fact that these fishers harvested a 'basket' of resources for commercial purposes (Raemaekers, 2009). The MLRA thus still failed to recognize their special needs as a 'distinct class of fishers' (Raemaekers, 2009).

In order to redress these and other imbalances, the national fisheries authority facilitated a process of drafting a new small-scale fisheries policy. The Policy was formulated as a response to pressures from small-scale fishers in the Eastern, Western and Northern Cape to be allocated with formal fishing rights in order to redress the inefficiencies of the existing permit system (Pederson et al., 2008; Raemaekers, 2009). While the process was initiated in 2004, to date the policy has not been finalized.

4.3.3 Benefits and losses from small-scale fisheries

Fisheries resources, especially in the small-scale fisheries sector, are known to be a source of various social, economic, ecological and cultural benefits for fishing communities around the

world, hence fish is often referred to as ‘rich food for poor people’ (FAO, 2005; Walmsley *et al*, 2006; WorldFish Centre, 2005). For most small-scale fishing communities, the act of fishing is not just about harvesting resources, but also about the economic, social and cultural connotations attached to fishing, such as employment, use of fisheries resources for spiritual customs and for medicinal purposes (Sunde and Raemaekers, 2010). Throughout the coast of Africa, fish is a staple meal for many households in rural communities, and is a main source of protein and important fatty acids (FAO, 2005). Furthermore, in most of West and Southern Africa in particular, women who are household heads dominate the small-scale fisheries sector and rely on processing, retailing and local trading of small-scale fisheries resources to support their households (WorldFish Centre, 2005). Most of these women are illiterate and uneducated, and, fish is the main or only income source to support themselves and their children (FAO, 2005).

Small-scale fishing communities are characterized by local political competition for access to and control of resources, as well as a myriad of collective action, power relations, social redistribution and decision-making processes and mechanisms related to marine resources (Béné, 2003). These factors are at the core of contemporary research aimed at enhancing benefits to local communities (Béné, 2003). In South Africa, co-management of small-scale fisheries has been instrumental in enhancing benefits to small-scale fishers in KwaZulu-Natal (Harris *et al*, 2003). Small-scale fishers in this province have benefited from equal participation and voting powers with the provincial fisheries authority, EKZN Wildlife, in decision-making processes about the management of the resources (Berkes *et al*, 2001; Harris *et al*, 2003).

However, co-management of fisheries resources is not always successful (Hara, 2003). Globally, benefits from fisheries co-management in the small-scale fisheries sector are constrained by the fact that the sector is economically, socially and politically undermined, and this inhibits the ability of small-scale fisheries to reduce poverty levels in poor and vulnerable fishing communities (Tandavanitj, 2007). Inadequate fisheries management strategies, insecure fishing rights, weak institutional structures and inadequate alternative livelihood strategies are among the key factors that create negative impacts for communities participating in small scale fisheries, preventing them from realizing full benefits from this sector (FAO, 2009). Sowman (2006) thus asserts that if the co-management of small-scale fisheries in South Africa is to be successful, an integrated livelihoods approach should be adopted. Sufficient devolution of decision-making power, human resources, money and time are key requirements for effective co-management practice (Harris *et al*, 2007).

Other blockages to benefit-sharing include the gap that exists between fisheries policy and law, practical implementation of fisheries management objectives, as well as academic research within the fisheries sector (Evans and Andrew, 2009). Moreover, the lack of human and physical resources in the national fisheries authority has been a major blockage to the implementation of efficient fisheries co-management strategies in marginalized areas like the Eastern Cape (Harris *et al*, 2007). One of the challenges in the small-scale fisheries sector in South Africa is that fisheries management is struggling to simultaneously conserve fisheries resources at the same time as provide equitable access to resources (Hauck, 2009). In addition, there appears to be a gap in, and a lack of understanding of, the complexity of livelihoods of small-scale fishers by the fisheries authorities. Thus, the new policy for managing small-scale fisheries in South Africa is seen as essential for bridging poverty, food insecurity and sustainability gaps within small-scale fisheries, and encouraging a participatory and human rights based approach to management (Sunde and Raemaekers, 2010).

4.4 Overview of the coastal mining sector

4.4.1 Global overview: trends towards Corporate Social Responsibility

Mining is among the major activities taking place adjacent to marginalized communities in many developing countries such as South Africa, Tanzania, Ghana, Zambia and Papua New Guinea, to name a few (Hilson, 2002; Kapelus, 2002). Over the past two decades, the reputation of mining with regards to its impacts on local communities has been questioned, particularly in developing countries (Veiga *et al*, 2001; Kapelus, 2002; Hilson, 2002). Many mining communities in developing countries occur in remote regions with poor livelihood diversification alternatives; hence mining companies are encouraged to practice sustainable mining practices including ecological sustainability, social equity and economic viability (Veiga *et al*, 2001). Mining communities can be defined as those “where the population is significantly affected by a nearby mining operation” (Veiga *et al*, 2001). Globally, mining corporations are facing immense pressure for social responsibility from those opposing mining activities, i.e. social justice advocates, environmental groups, and others, who are increasingly globalizing and teaming up with civil society groups at the local level (Kapelus, 2002). As a result, mining companies around the world have been pressurized to address the social and environmental impacts of their operations.

Corporate social responsibility (CSR) is one approach that has emerged to deal with these concerns, and is a dominant discourse in the mining sector, as companies face the pressure to

adhere to sustainable development practices (Kemp, 2009). The CSR strategy has become a global trend in businesses and one that is also increasingly dominating the South African private sector. Since the 19th century, most mining companies in developing countries have historically adopted a 'devil may care' attitude towards the impacts of their operations on adjacent communities (Kemp, 2009). However, mining companies have been recently urged to adopt CSR approaches in the interest of development and social justice by human rights activists and pressure from shareholders and financial institutions that promote social justice. According to Jenkins (2004:24), CSR is a conceptual framework through which mining companies can "frame their attitudes and strategies towards, and relationships with stakeholders, be they investors, employees or communities". It is also a tool that is used by the mining industry to balance a) the diverse community demands on the mining company in question; b) the need to protect the environment; and c) the need to make profits (Jenkins, 2004). Enforcing CSR strategies enhances the image of mining corporations with regards to their business ethic. However, it is not certain as to whether CSR strategies effectively address the developmental issues faced by most communities in developing countries where mining operations take place (Hamann, 2004).

Indigenous communities have benefited immensely from increased opposition to mining Trans National Corporations (TNCs) by civil society groups, and these communities are now challenging mining corporations on issues such as benefit flows, participation in decision-making, representation in the companies' activities, mining rights, compensation measures, land claims, and others (Kapelus, 2002). Organizations supporting businesses, such as the World Business Council for Sustainable Development (WBCSD), have made efforts to improve the bad reputation of mining companies with regards to social responsibility and have developed a global program called 'Mining Minerals and Sustainable Development' (MMSD) to uncover how mining can contribute to sustainable development (Kapelus, 2002). The 1992 Rio Earth Summit, coupled with criticisms that mining TNCs fail to maintain or enforce minimum standards in developing countries, have also been sources of pressure for mining companies to strengthen their CSR strategies (Kapelus, 2002). In the South African context, the shift towards CSR began in the late 1980s, as government began to challenge businesses to get socially and politically involved with communities to alleviate poverty (Kapelus, 2002). Post-apartheid laws have also enforced that affirmative action, Black Economic Empowerment (BEE), corporate governance and environmental management standards should be observed by mining businesses.

4.4.2 The South African coastal mining sector

South Africa has some of the world's largest gold, platinum and titanium reserves and is the world's second largest producer of titanium-bearing minerals (Crush *et al*, 1991; Hamann, 2004). Mining companies in South Africa have a history of disregarding social impacts of mining operations on affected communities. Companies have typically either provided too few benefits to local communities, leaving them in a more marginalized and worse off state than they were before the mining began, or have implemented ineffective strategies to benefit communities adjacent to mining operations (Kapelus, 2002; DMR, 2009). Pressures from affected communities, civil society and government have led to a realization by South African mining companies that it is in their best interest to address issues affecting the communities on the land in which they mine (Kapelus, 2002). Key institutional changes have taken place in the South African mining industry since 1994, including the listing of large mining companies in South Africa on international stock exchanges. This has had huge implications for mining companies, as they are required to meet the expectations of international (and local) investors. hence CSR is promoted by market-based drivers such as the Stock Exchange (Hamann, 2004). The following sub-section discusses the policy and legal context for the South African mining industry.

4.4.3 Policy and legal context in South Africa

All mining activity in South Africa is administered by the Department of Mineral Resources (DMR), formerly known as the Department of Minerals and Energy (DME), which is the major stakeholder in the South African mining sector (Boocock, 2002; Raw Materials Group, 2010). The Chamber of Mines, which comprises major mining companies in South Africa, is the second largest stakeholder. The National Union of Mineworkers (NUM), a South African trade union, and the African National Congress (ANC), are the third and fourth most important actors in South African mining, respectively (Raw Materials Group, 2010). The Minerals and Petroleum Resources Development Act (28 of 2002) (MPDRA) recognizes the South African government as the custodian of all mineral resources, having the responsibility to provide previously disadvantaged individuals with equitable access to mineral resources as well as socio-economic development (DME, 2008). The MPRDA regulates all extraction, rehabilitation, rights, mineral sales, beneficiation and marketing activities related to mining (Raw Materials Group, 2010). Company-community relations in the mining sector are guided by the principles of the Broad-Based Socio-Economic Empowerment Charter, and as a result, a large number of Black Economic Empowerment

(BEE) deals and joint ventures between mining companies and adjacent have emerged (DME, 2008).

The Constitution of the Republic of South Africa enforces the right of all people to an environment that is not harmful to their health and well being and to the protection of the environment for the benefit of present and future generations (South African Government Gazette, 1998). The Minerals Act (50 of 1991), MPRDA, and the Mine and Safety Act (29 of 1996) ensure compliance to this. In addition to the mining regulations stipulated by DMR, mining is also subject to the regulations of the National Environmental Management Act of 1998 (Boocock, 2002). The Minerals Act of 1991 stipulates that all active mines should have a mining permit from DME, a permit to use water from Department of Water Affairs, and an environmental management plan (EMP), including an Environmental Impact Assessment (EIA), approved by DME in order to ensure that their activities are in line with environmental management principles (Boocock, 2002). The Minerals Act also entrenches rehabilitation of the surface after mining and stipulates that mining companies should rehabilitate the surface land after mining is done. Rehabilitation takes place in parallel to the mining operation to return the land to the state in which it was found before the mining started (Boocock, 2002). There is increased pressure by the South African government for mining companies to minimize the negative social impacts of mining and promote benefits (Hill, 2005). The Broad Based Socio-Economic Empowerment Charter (BBSEEC) for the Mining Industry and the MPRDA have placed stringent requirements on mining companies to assess the social impacts of their operations from the beginning of mining to mine closure and beyond, as a requirement to secure mining rights. Social and Labor Plans (SLP) are also a legal requirement from mining companies to promote socio-economic development in affected communities and to combat adverse effects of mining on the communities involved (Hill, 2005). Social Impact Assessment (SIA) is also used as a tool to identify and mitigate social impacts associated with mining activities. The BBSEEC developed by the South African government stipulates that mining companies are required to give 26% of their shares to affected communities. A BEE scorecard was established to assess the implementation of mining companies' CSR strategies within local communities (Hamann, 2004).

Mining companies have been urged to promote sustainable development through partnering and aligning with communities and other interested and affected parties at the local level. Such efforts are perceived by the South African government to be a catalyst to poverty alleviation and community upliftment in poor and marginalized communities. The South African Mining Charter enforces the concept of pro-poor mining by encouraging mining

companies to actively engage in redressing past social inequities through enhancing opportunities for previously marginalized persons and communities to participate in the mining industry and to benefit from mining activities (Raw Materials Group, 2010).

Employment equity, beneficiation, as well as rural development, are some of the requirements contained in the Charter. Hence, the Mining Charter has championed the process of rights transfer by the mining companies adopting the Broad Based Black Economic Empowerment approach.

4.4.4 Identifying benefits, losses and benefit-sharing mechanisms

The extent to which local communities benefit from mining and the manner in which mechanisms are used for benefit distribution within the mining sector is poorly documented in the literature (Gibson, 2000; O’Faircheallaigh, 2002; Ballard and Banks, 2003). Humphreys (2000) asserts that calculating precise benefits and losses incurred by local communities due to mining is not a straightforward task, hence the success of a mining company in benefiting a local community from mining can be measured in terms of what does not happen rather than what does (i.e. it is measured more upon the company’s ability to prevent negative impacts or costs to the affected community). Hence, mining operations are regarded as acceptable so long as costs to the community are remediated and the socio-economic benefits (i.e. employment, capacity building and community development) are enough to sustain the local community (Gibson, 2000).

Benefits provided by mining such as compensation for negative impacts incurred, royalties on mineral resources, income from employment, income participation in joint ventures, as well as access to infrastructure created due mining operations are significant to communities that lack the alternative income opportunities that mining can bring (Ballard and Banks, 2003). Although mining activities may be associated with major development changes, the benefits mining brings to communities, such as employment opportunities and infrastructure development, do not necessarily make up for the adverse effects or costs of mining operations normally suffered by communities (Jenkins and Obara, 2008).

Losses or costs incurred by communities due to mining operations include disruption of traditional cultures, population displacement, land use conflicts and loss of livelihoods (Boocock, 2002). Mining operations adversely affect communities almost by necessity through the displacement of local people and the loss of natural resources. In addition, mining has permanent negative environmental impacts as it results in the exhaustion of non-

renewable natural resources (Boocock, 2002). It is, however, argued that although mining operations inevitably present various adverse effects on local communities, in some cases, mining activity is the only real chance that a poor community has for social development – especially where mining benefits are properly redistributed to people in the communities (Kemp, 2009). For this reason, and because of inadequate service delivery by the government, poor communities fear to act against mining operations in their areas because they feel that they depend on mining for a chance at having a better life (Kemp, 2009). Moreover, if mining companies are able to convince those opposed to mining operations that communities do benefit from their operations, then the companies are able to protect themselves from civil society action, liability costs and disruptions (Kapelus, 2002).

Commentators note that in order to be regarded as sustainable, mining companies' CSR programs should provide net and equitable benefits, capacity building during the mining operation and after mine closure, financial compensation for loss of land, housing and livelihoods, infrastructure improvement, health facilities, small local businesses' support and micro-finance schemes (Jenkins and Obara, 2008; Boocock, 2002). The institutional arrangements that are used by mining companies to implement CSR and other projects to benefit adjacent communities are mechanisms used in the mining sector to distribute mining benefits (DMR, 2010). Apart from the pressure placed by policies and laws on mining companies to conduct CSR and community development programs for impacted communities, mining companies also implement CSR and community development programs for their own benefit. Corporate Social Responsibility and community development strategies help give mining companies a competitive edge because they improve the reputation and profit margins of the companies, as they are seen by investors as socially and environmentally sustainable. In addition, CSR initiatives are a strategy through which mining companies 'buy' the local communities' consent to allow the company to mine in their area (Jenkins and Obara, 2008). Social investments are also used by mining companies as a tool to deliver 'net benefits' to the communities that are impacted by their operations (Esteves, 2008).

Despite CSR strategies, mining companies have been criticized in terms of how they disadvantage communities and create livelihoods losses. Such criticisms are largely attributed to the lack of transparency with regards to revenue flows from the company to the community, and expenditure in the community (Jenkins and Obara, 2008). Lack of transparency often results in inequitable distribution of benefits from mining to the wider

communities and this creates tension within and between communities involved. In addition, because most affected communities are rural or disadvantaged, most mining companies use local committees, giving mining revenues to the local chiefs or 'top men' to allocate for community use (Jenkins and Obara, 2008). However, these funds end up being consumed by leading community figures instead of being used for long-term community projects and for building social capital. Furthermore, because mining companies have historically ignored direct communication with communities due to apartheid policies, it is now difficult for them to establish local representative institutions that local communities can identify with. Consequently, the efforts made by mining companies to communicate with communities are often impeded by local power struggles within the communities-both between the tribal authorities and communities, and between the tribal authorities and local government structures responsible for service delivery (Hamann, 2004). Due to this, CSR can intentionally or unintentionally damage disadvantaged communities as benefits do not always filter down to the wider communities (Swift and Zadek, 2002).

It is also argued that there exists a gap between the stated intentions of mining companies in their CSR reports and the effectiveness of the actual implementation of the CSR programs on the ground. There is also very little research undertaken to assess the impacts of CSR programs on local communities and whether or not they are successful (DMR, 2009). It is thus argued that in the absence of strong institutions at the local level, mining companies have the potential to worsen the situation for the poor communities and to deplete whatever limited resources the community had to sustain themselves (Jenkins and Obara, 2008).

4.5 Conclusion

Coastal resources provide various ecological, social and economic benefits to rural coastal communities in South Africa through the small-scale fisheries and mining sectors. Although the post-apartheid government has made efforts to encourage the redistribution of benefits from coastal resources to marginalized coastal communities, questions remain about whether these communities benefit or lose from resource use within these sectors. This chapter has shown that although benefit-sharing mechanisms exist within the fisheries and mining sectors in rural coastal communities, these may result in losses to the livelihoods of coastal resources users. The role of TAs in administering activities taking place within rural coastal communities cannot be overlooked when seeking to understand benefit-sharing patterns in

coastal resource use sectors. The next chapter provides detailed results from the fisheries and mining sectors in the Sokhulu and Mbonambi case studies.

SOKHULU AND MBONAMBI CASE STUDIES

5.1 Introduction

In the face of poor living conditions, high unemployment levels and limited livelihood options, people in Sokhulu and Mbonambi have over the years relied on coastal resources such as fish, forest products and agriculture, to support themselves and their families. These interventions have been associated with various ecological, economic, and social benefits and losses, and benefits arising out of these interventions have not always been fair. The institutions involved in managing access to and use of coastal resources, and distributing benefits arising from resource use, have put in place mechanisms within the communities to enhance benefit-sharing. These mechanisms have led to an array of positive and negative impacts on the lives of coastal resource users and other community members. This chapter provides an in-depth account of the socio-economic status of the Sokhulu and Mbonambi

communities, and describes the history of their coastal resource use. It also provides an overview of community benefits and losses, and discusses the factors that influence benefit-sharing patterns in the fisheries and mining sectors within Sokhulu and Mbonambi.

5.2 A history of coastal resource use in Sokhulu and Mbonambi

Historical patterns of coastal resource use in the Sokhulu and Mbonambi communities are not well documented in the literature. However, Sokhulu and Mbuyazi (another name for Mbonambi) clans were among the original occupants of the coastal land in northern KwaZulu-Natal, specifically in what is now known as iSimangaliso Wetland Park, and paleontological evidence has shown that the first human occupation of the Park dates as far back as the Early Stone Age (UNEP and WCMC, 2008; Gumede, 2009). Various events or interventions have taken place over time to influence the manner in which both Sokhulu and Mbonambi communities have accessed and used coastal resources. Timeline exercises conducted with several coastal resource user groups in both communities were used to elicit information about coastal resource access and use. The earliest living memory that the oldest interviewees at Sokhulu and Mbonambi had of historical events that impacted their livelihoods and resource use dated from 1933 (Figure 5.1).

In 1933, commercial forestry was first introduced by white people in Sokhulu and Mbonambi, and conflicts resulted between the communities and forestry authorities. Communities at Sokhulu and Mbonambi were forcibly removed from their land for commercial forestry purposes by a group known as Government Garage (G.G.) (UNDP et al., 2003; SFFG 1; MFFG 1). One of the *Ndunas* from Sokhulu recalled,

Historically, the beach area was mainly grazing land and beyond the grazing land were people's settlements. However, in 1939, a white man called Nkonka came and on his arrival to the area, he said local people should move from the beach land because the sand was being denuded by the wind and it needed to be fenced properly to prevent this. Our local people therefore moved away from the land close to the beach and left their houses and the graveyards of their ancestors there (MFFG1).

At Mbonambi, the G.G. reportedly convinced the Inkosi to remove local people along the beach area towards the inland area so that the government could plant eucalyptus and other

plantations in order to stabilize the sand in the dunes. The G.G. claimed that once the sand dunes have stabilized, they would resettle the local people back to their land.

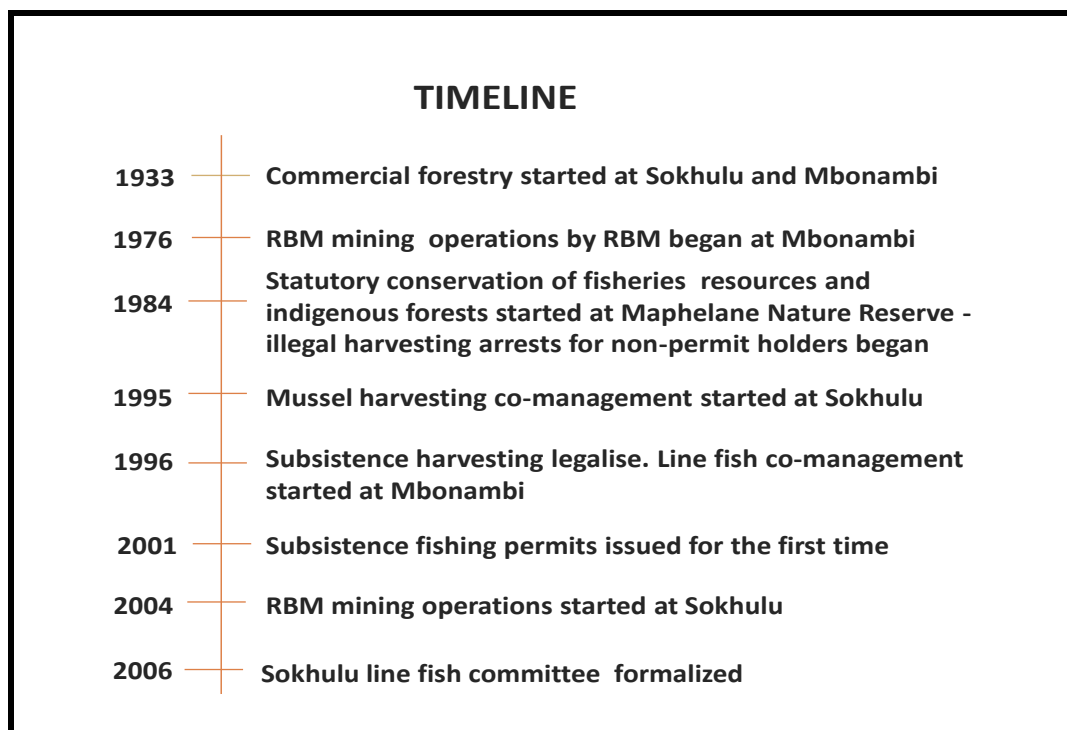


Figure 5.1: Timeline of key events that have influenced the use of coastal resources in Sokhulu and Mbonambi over time

People agreed to move and lost access to the land adjacent to the beach area. The G.G. planted commercial plantations along the beach and put up fences to inhibit local people from accessing this land. Cairns (2000) confirms that in the late 1950s, government officials threatened people in Sokhulu and Mbonambi communities with forced removals in order to plant commercial plantations to stabilize sand dunes. The communities believed that the government wanted to forcibly remove them from their land for its own commercial plantations and its own gain, and as a response, the communities negotiated that they would plant the trees themselves instead of the government taking over their land (Cairns, 2000). A few community members remained on their land and planted the trees themselves, while the majority of people in these communities were displaced.

Sokhulu and Mbonambi were not the only communities in northern KwaZulu-Natal that were subject to forced removals by the former apartheid government for either commercial forestry or conservation. According to Walker (2005), more than 1,000 Zulu speaking households were historically forcibly dispossessed of their land for nature conservation and commercial

forestry purposes along the KwaZulu-Natal coastline, especially between the 1950s and 1980s. To date, Sokhulu and Mbonambi areas together consist of 4,226 hectares of state commercial forests, as well as vast eucalyptus plantation forests owned by forestry giants, Mondi and Sappi (DWAF, 2010). Since the 1980s, small-scale forest farmers in Sokhulu and Mbonambi have been selling products from their eucalyptus plantations to Mondi and Sappi.

The development of timber plantations in northern KwaZulu-Natal was paralleled by the demarcation of certain conservation areas, causing the displacement of rural communities in the 1960s, especially near the coast of iSimangaliso Wetland Park (Karumbidza, 2006). The history of forced removals was a particularly big problem in the northern KwaZulu-Natal region and is still a problem facing the authorities of the Park, as several surrounding communities claim to own the areas covered with commercial forests and conservation land in this region. For instance, Sokhulu and Mbonambi communities have both lodged land claims with the Commission on Restitution of Land Rights over RBM's mining lease areas as they claimed to have been resettled from their ancestors' land because of mining activities (Parliament, 2010). Richard Bay Minerals commenced mining at Mbonambi in 1976 and at Sokhulu in 2004, and its mining life is expected to last until the year 2041. People in Sokhulu and Mbonambi communities were devastated to have lost control over the land mined by RBM, as the indigenous forests and their ancestral land were destroyed (SFF1, MFFG1). Consequently, the relationship between RBM and the people in Sokhulu and Mbonambi has been turbulent over the years.

The establishment of the Maphelane Nature Reserve adjacent to the Sokhulu community in 1984 also led to turbulence between the community and the conservation authority at the time (Natal Parks Board) because the community lost control over the land under the Reserve (UNDP et al., 2003). The Maphelane Nature Reserve was established with the intention of protecting and conserving the forest and marine biodiversity occurring in this area (UNDP et al., 2003). Due to the rich biodiversity and beautiful scenery, the reserve is a tourist attraction, particularly for recreational fishers. The protection of the reserve by the nature conservation authorities was done without community consultation. Community access was also restricted by conservation rules and subsistence fishing methods were deemed illegal in this era. The Sokhulu community was unhappy about the establishment of the reserve and the introduction of conservation laws because their subsistence needs that the resources in the Reserve used to provide were overlooked. This was problematic as people in Sokhulu had harvested marine

resources along this coastline for years. As a result, people in Sokhulu (and Mbonambi) resorted to large-scale poaching of fisheries resources along the coast of Sokhulu and Maphelane at night time. Conflicts arose between subsistence fishers and licensed recreational fishers and between subsistence fishers and the conservation authorities (Harris et al., 2003).

In an effort to redress these problems, the Sokhulu mussel co-management project was initiated by EKZN Wildlife in 1995 to facilitate the inclusion of subsistence fishers in the management of the fishery in order to promote the sustainable use of the resources (Harris et al., 2003). A joint committee comprising conservation authorities and community harvesters was formed in order to implement co-management. Through co-management, legal access to the mussel and line fish resources was granted to subsistence fishers at Sokhulu, and later in Mbonambi and other subsistence fishing communities along the KwaZulu-Natal coast. At the same time, the Sokhulu community also lodged a land claim with the Regional Land Claims Commission over the land under the Maphelane Reserve, seeking to repossess the historical rights that they claimed to have over the land and resources. This land claim and five others on land within the iSimangaliso Wetland Park were settled in 2007, and the communities were compensated with money for their loss of land. Co-management arrangements were simultaneously formed between the authorities of the Park and the communities in order to implement the settlement of the land claims.

5.3 The socio-economic status of Sokhulu and Mbonambi

The Sokhulu and Mbonambi TA areas are located within the Mfolozi Local Municipality, formerly known as Mbonambi Local Municipality (Figure 5.2). This municipality is located in northern KwaZulu-Natal, within the uThungulu District Municipality. The uThungulu District Municipality is located in the north-eastern region of KwaZulu-Natal and consists of six local municipalities, i.e. Mfolozi, Umhlathuze, Ntambanana, Umlalazi, Mthonjaneni and Nkandla (uThungulu District Municipality, 2005/6). The Mfolozi Local Municipality is adjacent to the towns of Richards Bay and Empangeni, and consists of three primary geographic land uses, i.e. Sokhulu-Mbonambi rural areas, Mhlana rural area, as well as commercial plantations (uThungulu District Municipality, 2010/11). The estimated population size of the Mfolozi Local Municipality is 106,943, 53% of whom are women. Household numbers in 2010 were 21,623 (Mfolozi Local Municipality 2010/11 IDP). This

local municipality is dominated by mining, commercial timber, subsistence fisheries, small-scale commercial forestry and subsistence agriculture. These sectors are also present within Sokhulu and Mbonambi (Table 5.1). The manufacturing sector, which includes mining by RBM and timber production by companies Mondi and Sappi, is the key player in economies of both the uThungulu District and the Mfolozi region, contributing approximately 51,4% to the entire district's Gross Geographic Product (GGP) (Mfolozi IDP Review, 2010/11).

Sokhulu land uses include mining, commercial forestry, conservation at Maphelane Reserve and TA land, consisting of mostly residential areas (villages), agriculture land and small-scale forestry plantations. Mbonambi has similar land uses, including commercial forestry, rehabilitated mines as well as TA land with villages, agricultural land and small-scale plantation forests. Figure 5.2 illustrates the geographic positioning of Sokhulu and Mbonambi TAs within the wider Mfolozi Local Municipality.

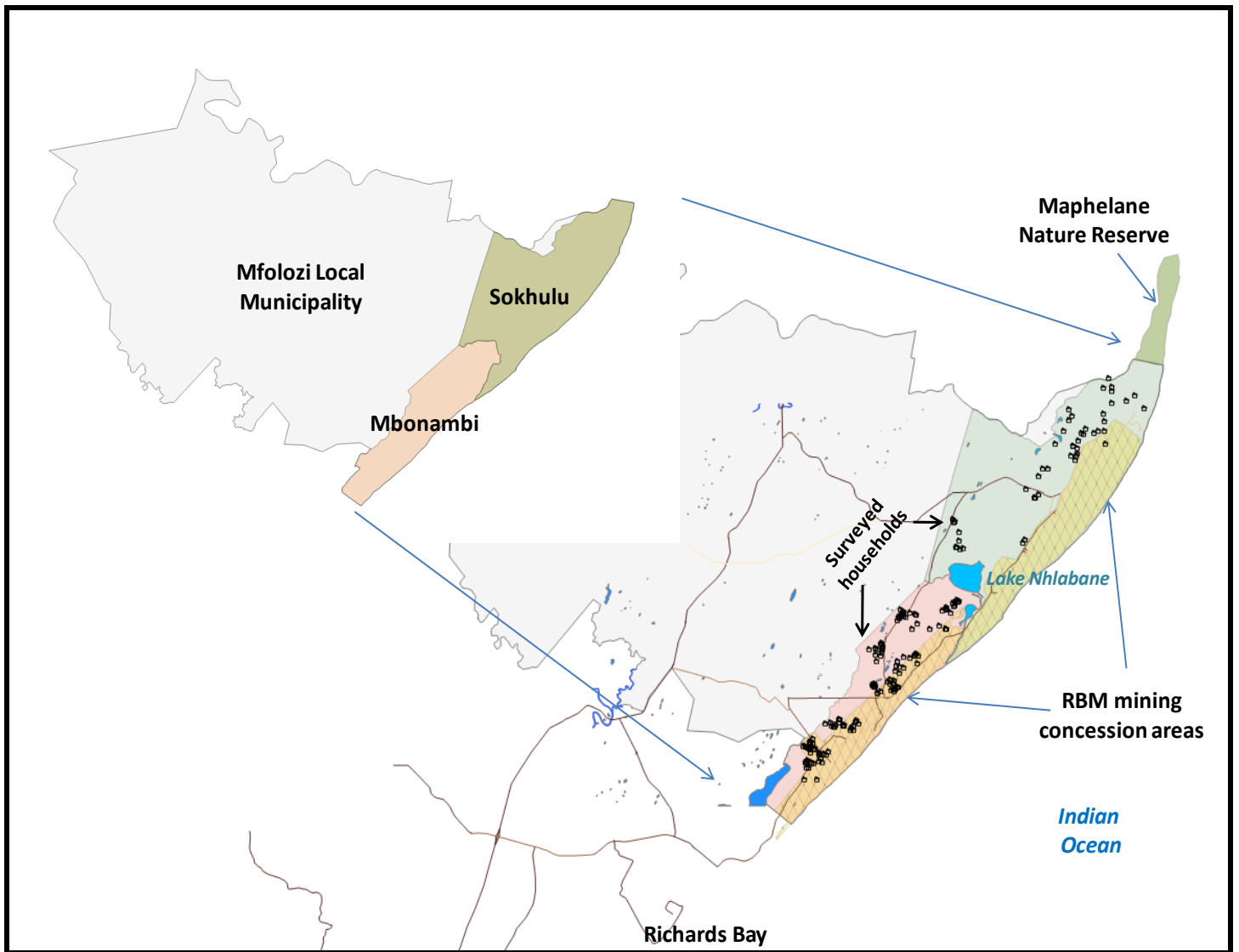


Figure 5.2: The location of Sokhulu and Mbonambi within the Mfolozi Local Municipality.
Lake Nhlabane is the geographic boundary between Sokhulu and Mbonambi communities.

Table 5.1: Sectors utilizing coastal resources at Sokhulu and Mbonambi

	Actors	Resources use/management mandate	Roles of actors
Fisheries sector: Sokhulu and Mbonambi	National level: Branch Fisheries - DAFF (formerly MCM)	Coastal resources: marine and terrestrial	Responsible for management of access to and use of marine resources
	Provincial level: EKZN Wildlife	Coastal resources: marine and terrestrial	Responsible for management and conservation of marine resources
	Co-management committees (EKZN Wildlife and community representatives)	Fisheries resources	Facilitate and manage sustainable use of fisheries resources
Mining sector: Sokhulu and Mbonambi	National level: DME	All national mineral resources	Custodian of national mineral resources
	Local level: RBM	Titanium	Possesses mineral rights on the coasts of Sokhulu and Mbonambi
	Local level: CSR committees and BBBEE Trusts	RBM community representatives	Distribute benefits from RBM's interventions to wider communities
Forestry sector: Sokhulu and Mbonambi	National level: DAFF	National forests	National forestry authority
	Provincial and local level: DAFF	Indigenous and commercial forests in KwaZulu-Natal	Management of indigenous and commercial forestry land in KwaZulu-Natal
	Forestry companies: Mondi, Sappi, Siyaqhubeka	Commercial forests: mainly eucalyptus, pine and casuarinas	Lease holders of commercial forestry land
Conservation and tourism sectors: Sokhulu	EKZN Wildlife	Coastal resources: marine and terrestrial	Managing the conservation of coastal resources
	iSimangaliso Authority	iSimangaliso Wetland Park, including Maphelane Nature Reserve	Management of all activities in areas falling under the Park

Table 5.2: Profile of Sokhulu and Mbonambi communities

	Sokhulu	Mbonambi
Municipal Ward	1,2,3	3,5,8
Size	8,145ha	14,877ha
Estimated homesteads	540	2,494
Number of villages studied	8	7
Household survey sample size	48	142
Gender breakdown (%)	69% females 31% males	65% females 35% males
% female headed households	23%	31%
Average no. of people per household	11	9
Main material for dwelling construction	Walls: brick and block Roof: corrugated iron	
Main household energy source	Firewood	Firewood and electricity
Main drinking water source	Water from flowing rivers/streams and from hand pumps	Water from mobile municipality water truck and from piped public stand posts

Unemployment levels in Sokhulu and Mbonambi were high, but lower than that of the wider Mfolozi Local Municipality. In the Mfolozi Local Municipality region, unemployment levels are 59% and 41% economically active population is employed. In Sokhulu and Mbonambi unemployment levels were 21% and 37%, respectively (Mfolozi IDP Review, 2010/11; Figure 5.4). The higher unemployment levels in Mbonambi can be attributed to the fact that 37% of the surveyed community members were not originally from Mbonambi, but had moved into the community primarily to look for employment⁸. The survey results also revealed that only 30% of Mbonambi households are employed by RBM or its contracting companies, which is arguably low considering the fact that RBM has mined along the community for more than 30 years. However, the percentage of skilled people in the Mfolozi

⁸ Richards Bay Minerals and Siyaqhubeka Forestry are two big companies located within Mbonambi that are potential employers to local people.

Local Municipality is low. In the wider Mfolozi Local Municipality, 30% of the population has no formal schooling, while only 13% has completed high school education (Mfolozi IDP Review, 2010/11). A similar trend was found in Sokhulu and Mbonambi, as only 15% and 16% of respondents in Sokhulu and Mbonambi, respectively, had complete high school education (refer to Figure 5.3).

In Sokhulu, 22% of the respondents were self employed, primarily in fisheries and farming activities, while 12% of the respondents in Mbonambi indicated that they were self employed in similar activities. The agriculture, forestry and fisheries sectors are responsible for employing 25% of households in Mfolozi Local Municipality (Mfolozi IDP Review, 2010/11). Richards Bay, Empangeni and EThekweni (i.e. Durban) are the three main places of employment for the few households in the Mfolozi Local Municipality that are employed in the formal sector.

Household monthly income ranges in Sokhulu and Mbonambi varied (Figure 5.5). In Sokhulu, 52% of households earned a monthly income between R1,001 and R1,700. Only 2% of Sokhulu households earned a monthly income more than R7,501. This confirmed the vulnerability and constraints of Sokhulu households' livelihoods, especially given the average household size in Sokhulu of 11 people. In Mbonambi, 58% of households earned between R1,001 and R3,000. Only 3% of households earned more than R7,501 per month.

Government pensions and child/disability grants were the largest contributors to monthly incomes in Sokhulu and Mbonambi; contributing incomes to 75% of households in Sokhulu and 61% in Mbonambi (Figure 5.6). More households earned incomes from employment in mining in Mbonambi than in Sokhulu, although households that earned incomes from employment in other formal sector activities were low in both communities (21% in Sokhulu and 20% in Mbonambi). Such low employment levels in the formal sector could be attributed to the fact the Mfolozi Local Municipality as a whole struggles with underdevelopment, lack of resources, inadequate infrastructure and a lack of a skills base. (Mfolozi IDP Review, 2010/11).

Other issues pertaining to lack of basic service delivery (i.e. water, electricity and sanitation) are a problem in rural areas within the Mfolozi Local Municipality and there is also a lack of infrastructural development such as roads, schools, community facilities and health care

facilities (Mfolozi Local Municipality, 2010/11). In Sokhulu, for instance, of the surveyed households, none had running water and only 22% had electricity supply. A similar situation prevailed in Mbonambi, although 42% households here had electricity supply. In Sokhulu, only one clinic that catered for the entire community and road systems were also poor, especially in areas not reached by mining operations.

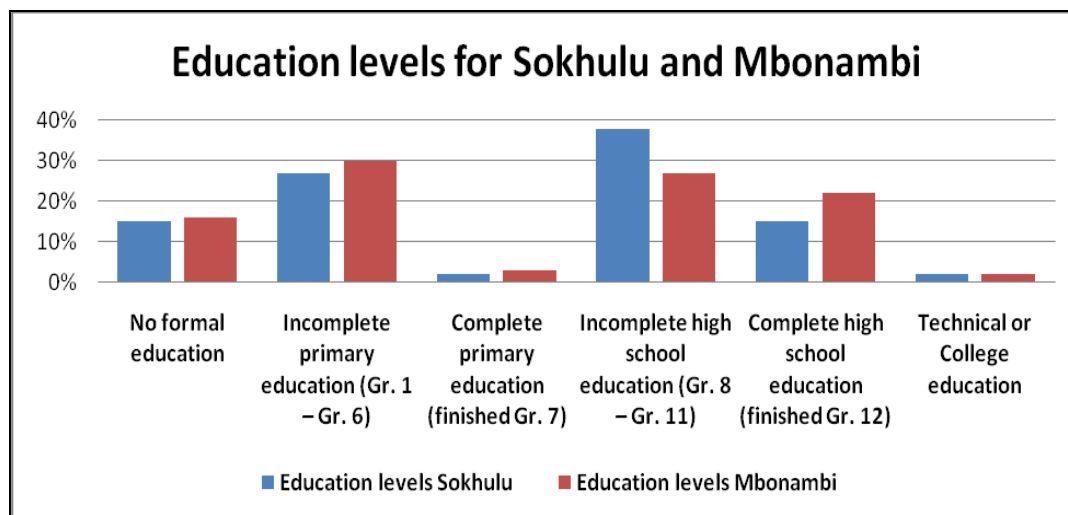


Figure 5.3: Education levels in Sokhulu and Mbonambi (Sokhulu: n=48; Mbonambi: n=142)

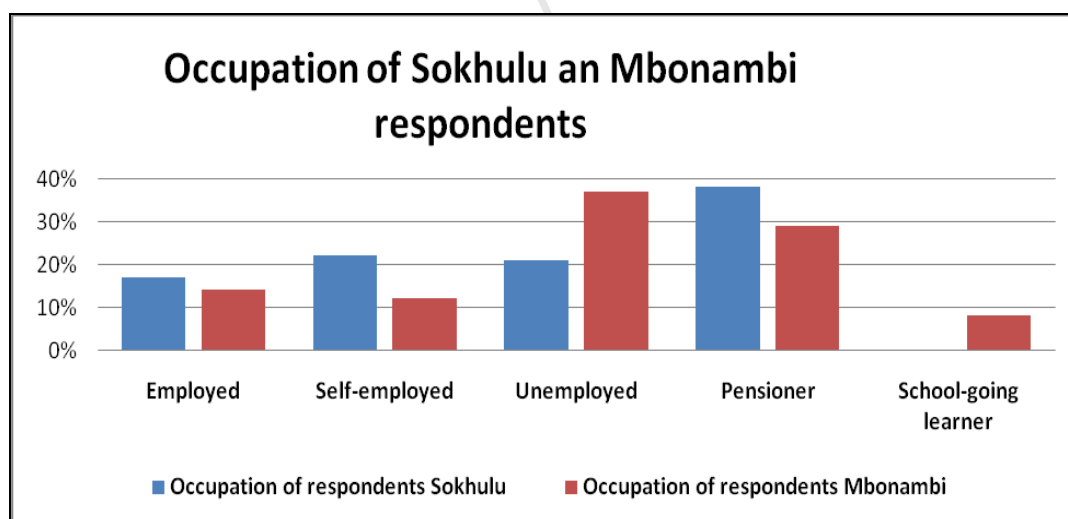


Figure 5.4: Occupation of survey respondents Sokhulu and Mbonambi (Sokhulu: n=48; Mbonambi: n=142)

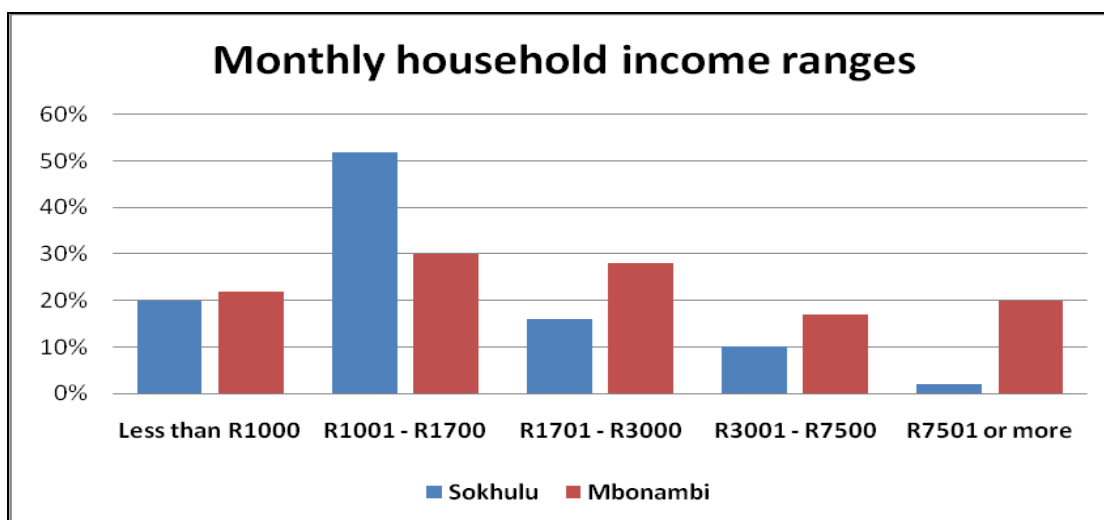


Figure 5.5: Monthly household income ranges in Sokhulu and Mbonambi (Sokhulu: n=48; Mbonambi: n=142)

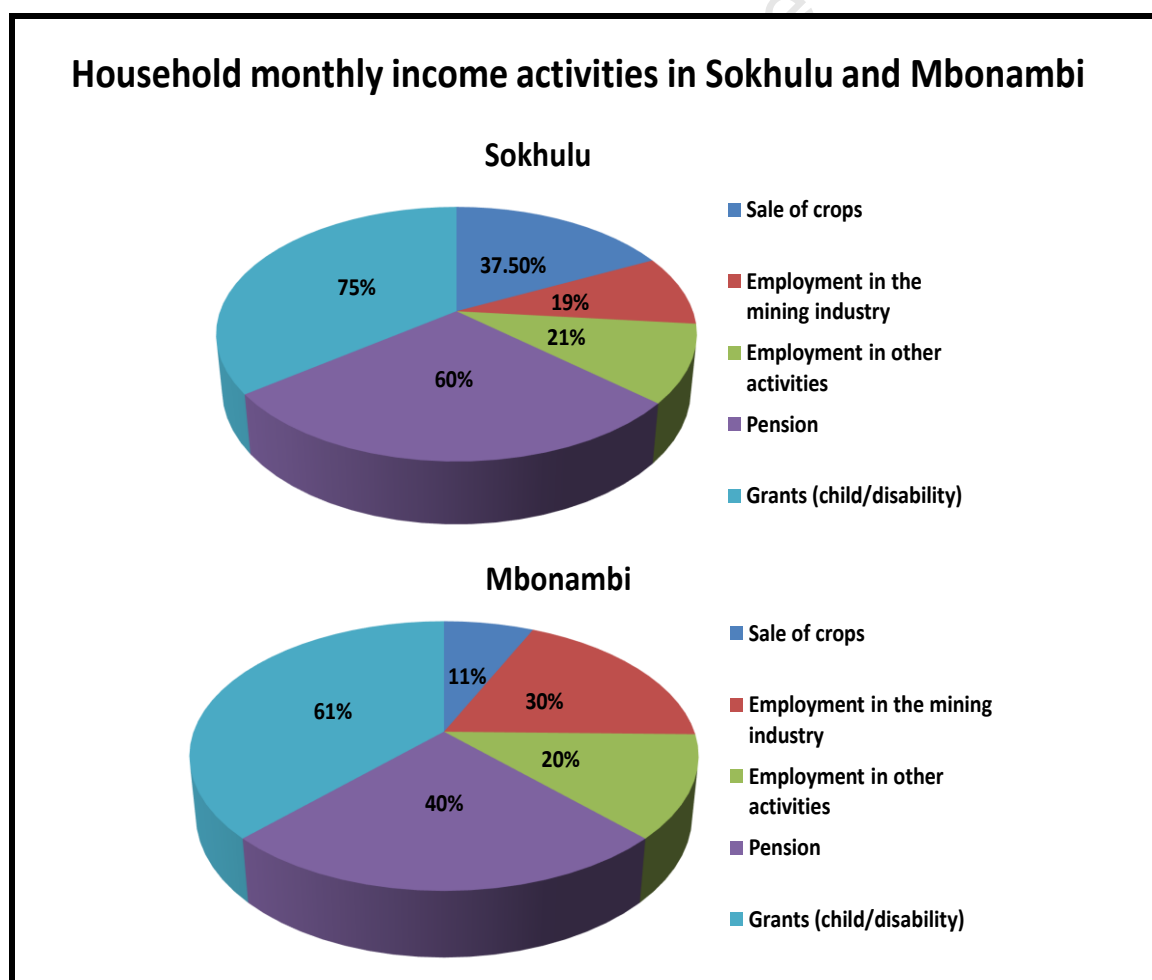


Figure 5.6: Monthly household income contributing activities in Sokhulu and Mbonambi (Sokhulu: n=48; Mbonambi: n=142)

The following section provides the results about the use of and benefits from small-scale fisheries resources in Sokhulu and Mbonambi.

5.4 The fisheries sector

5.4.1 The fisheries sector in Sokhulu and Mbonambi: actors and resources

People in Sokhulu and Mbonambi claimed to have a long history of harvesting mussel, line fish, sea lice, crayfish and crab along their coastline, although they possessed harvesting permits for line fish and mussel resources only. The Sokhulu and Mbonambi fisheries are currently co-managed by EKZN Wildlife and local fishers in these communities. The household survey revealed that 79% and 54% of households in Sokhulu and Mbonambi, respectively, benefited from fisheries resources, primarily through consumption, indicating that marine resources are an important source of food and protein for themselves and their families. Although mussel harvesters in Mbonambi had no formal rights to harvest mussels at the time that data was collected for this study, they noted that they did benefit by illegally harvesting these resources. Of Sokhulu and Mbonambi fishing households that were surveyed, 74% and 72%, respectively, did not possess fishing permits (Table 5.3).

In Sokhulu, fishing households had fished for an average of 20 years, and 55% of them fished for subsistence. Mbonambi fishing households had fished for 15 years and 64% of the fishers fished for subsistence. There were more female than male fisheries resource users both in Sokhulu and Mbonambi, and the average age of female fishers was higher than that of male fishers in both communities (see Table 5.3). Less than 3% of the surveyed fishers in Sokhulu and Mbonambi possessed an education beyond high school, indicating that the fishing population in these communities lacked skills to participate in the formal economy. Moreover, 45% and 33% of the female respondents in the Sokhulu and Mbonambi surveys, respectively, who harvested fisheries resources were household heads. However, the findings of this study revealed a degree of livelihood insecurity and vulnerability of fishers and their households in Sokhulu and Mbonambi, as 29% of Sokhulu and 39% of Mbonambi of respondents were unemployed and had no formal income sources.

Table 5.3: Profile of fishers in Sokhulu and Mbonambi

		SOKHULU (n=38)	MBONAMBI (n=36)
Gender breakdown		Females: 28 (74%) Males: 10 (26%)	Females: 22 (61%) Males: 14 (39%)
Permit holders		10 (25%)	10 (28%)
Average age (in years)		Females: 43.4 ± 16.1 Males: 36.9 ± 17.8	Females: 44.2 ± 17.8 Males: 34.5 ± 19.1
Occupation	Employed	6 (16%)	2 (5%)
	Self-employed	14 (37%)	5 (14%)
	Unemployed	11 (29%)	14 (39%)
	Pensioner	5 (13%)	10 (28%)
Monthly household income	<R1000	6 (16%)	6 (17%)
	R1001-R1700	21 (55%)	12 (33%)
	R1701-R3000	5 (13%)	11 (30%)
	R3001-R7000	5 (13%)	3 (8%)
	R7500+	1 (3%)	1 (3%)
Education level	No formal education	5 (13%)	4 (11%)
	Incomplete primary school education	13 (34%)	11 (30%)
	Incomplete high school education	13 (34%)	14 (39%)
	Complete high school education	6 (16%)	5 (14%)
	Tertiary/College education	1 (3%)	1 (3%)
Household heads		Females: 11 (29%) Males: 5 (13%)	Females: 7 (19%) Males: 5 (14%)



Figure 5.7: Fishers at Sokhulu and Mbonambi

5.4.2 Mechanisms and tools for enhancing benefit-sharing in the fisheries sectors in Sokhulu and Mbonambi

The provincial nature conservation authority, EKZN Wildlife, has since 1995 implemented co-management arrangements for line fish and intertidal resources, as a way of resolving conflicts between themselves and the communities and also as a way of enriching the livelihoods of fishers and their households in these communities through enhanced access to the resources (Harris *et al.*, 2003). This subsection looks at how the institutional arrangements put in place to implement co-management have acted as mechanisms to enhance access to and benefits from the fisheries sector for local fishers.

Small-scale fisheries in KwaZulu-Natal are managed at three levels, i.e. national, provincial and local (Figure 5.8). The Branch Fisheries department of DAFF (formerly known as MCM) is responsible for managing small-scale fisheries at the national level. At the provincial level, the implementation and management of small-scale fisheries has been devolved by DAFF to EKZN Wildlife, which works closely with the national Subsistence Fisheries Management Unit (SFMU) in managing small-scale fisheries in the province (EKZN Wildlife, 2010a). At the local level, EKZN Wildlife have initiated a co-management arrangement between

themselves and local subsistence fishing communities, including Sokhulu and Mbonambi, by forming committees for managing line fish and intertidal resources (EKZN Wildlife, 2010a).

In Sokhulu, co-management of fisheries resources between EKZN Wildlife and the community fishers began in 1995 with the inception of the mussel co-management project (Harris et al., 2003). A significant aim of the co-management project was to increase the participation of community fishers in the decision-making processes in terms of how the resource is to be utilized (UNDP *et al*, 2003). The election of co-management committees by community fishers is a significant democratic mechanism that establishes legitimacy and accountability between EKZN Wildlife and the fishers (EKZN Wildlife, 2010a). The term 'mechanism', according to Ribot and Peluso (2003), is used to refer to the various processes and relations that influence how stakeholders gain, control and maintain access to resources. Hence, in the context of the fisheries sectors in Sokhulu and Mbonambi, co-management committees were enabling mechanisms for the communities to become involved in fisheries and to partake in the decision-making processes pertaining to the use of the resources.

The co-management committees formed by EKZN Wildlife consist of Conservation Officers and Extension Officers from EKZN Wildlife who work with community members chosen by community fishers to represent them (Figure 5.8). The community members in the co-management committees are responsible for nominating people from the community who are deserving of subsistence fishing permits, based on agreed criteria. The list is screened once a year. Once the people who should get permits are identified, their applications are sent to EKZN Wildlife and from there, to DAFF for permit issuing (EKZN Wildlife, 2010a).

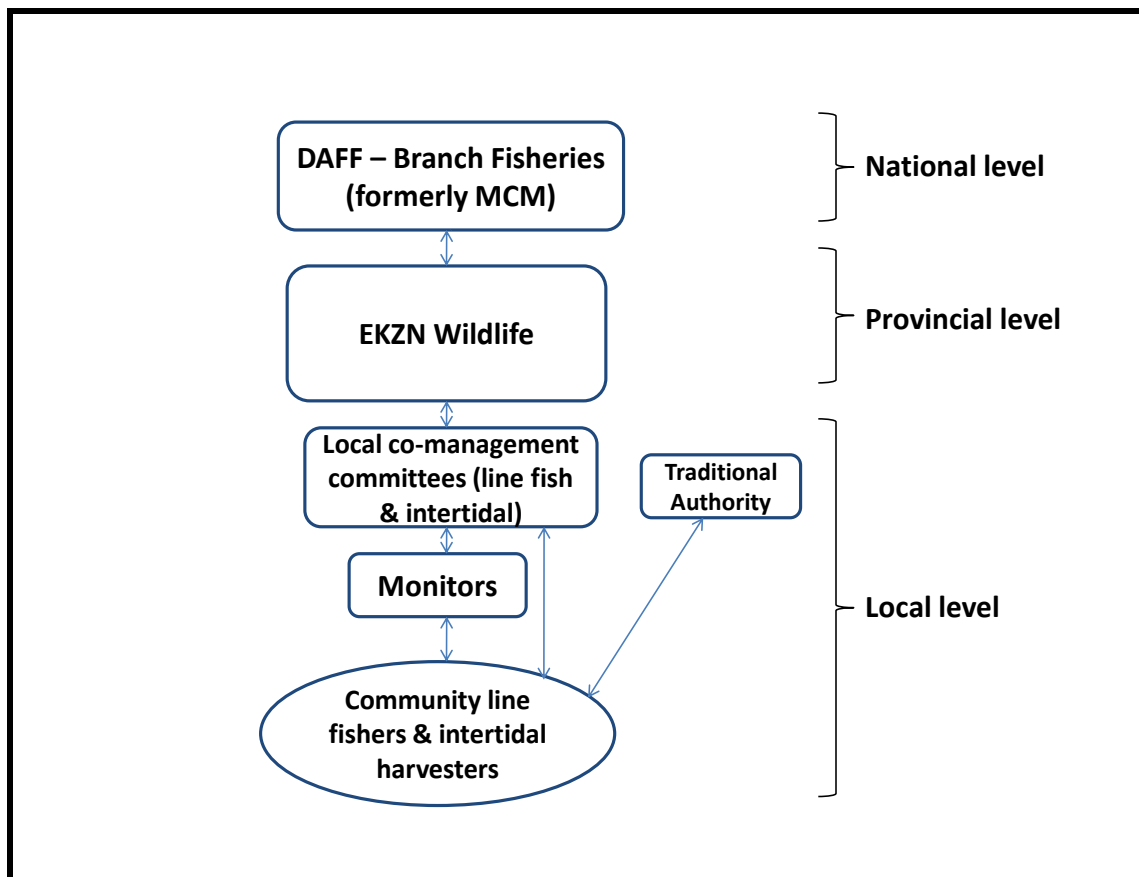


Figure 5.8: The institutional arrangement for fisheries management at Sokhulu and Mbonambi

At the community level, there were two co-management committees at Sokhulu, i.e. the mussel committee and the line fish committee. The mussel committee mainly comprised female mussel harvesters who represented all mussel collectors in decision-making processes with EKZN Wildlife. The line fish co-management committee was formed in 2004 and is made up of male fishers who represented community fishers in decision-making processes and the management of fish resources. The two committees are responsible for appointing community monitors who are responsible for monitoring the fishing activities of community fishers (EKZN Wildlife, 2010b). Similarly, Mbonambi had a line fish committee that was established in 1996 to represent community fishers. Members of the mussel committee⁹ unofficially existed in Mbonambi during the time this research was undertaken because the Mbonambi community had not yet received legal rights to harvest mussels from the national fisheries authority. This was due to the fact that there was apparently no proof that the community had a history of harvesting the resource, and also because the mussel ledges on

⁹ The members of the mussel committee were appointed by Mbonambi fishers when they applied for legal rights to harvest mussels. However, when mussel collectors were denied permits to harvest mussels due to concerns about resource availability in Mbonambi by conservation authorities, the mussel committee remained inactive, although some of the members continued working together with the line fish committee (EKZN 2).

the Mbonambi coast were deemed too small to cater for the entire Mbonambi community (EKZNW 1; EKZNW 3). Traditional authorities in both communities oversee all activities taking place in all sectors within the community, but have no direct involvement in the fisheries sector.

Subsistence permits are a tool used to distribute benefits from access and use of the resources to small-scale fishers in Sokhulu and Mbonambi. In turn, through issuing permits to local fishers as part of co-management, permits are also a tool to increase compliance for resource use and enhance resource sustainability (EKZNW 1). Through the co-management process, the fishers were involved in establishing the criteria for permit allocation for local fishers (EKZN Wildlife, 2010b). The following are the key criteria to be met by fishers in Sokhulu and Mbonambi to qualify for permit allocation: fishers must be South African citizens; they must be poor and have no other income sources that can help meet their basic food requirements; they must use low technology gear; they should preferably have a long history of fishing and fishing should have a cultural or traditional role in their lives that has been carried over through at least three generations or 50 years; they must only sell their catch within the 20km radius of where it was caught; and the resources are only to be consumed within local boundaries (SFFG1). The DAFF issues permits to successful applicants in small scale fishing communities annually, and requires that committees be in place in small-scale fishing communities before permits are issued (EKZN Wildlife, 2010b). The local co-management committees in Sokhulu and Mbonambi receive the permits on the community's behalf and together with the community determine the number of individual permits that are issued, how many times harvesting should occur, and which subsistence zones to focus on when harvesting. The co-management committee chairpersons screen community members who apply for permits to give preference to those who have no other income sources for consideration to get permits (SFFG 1 and SFFG 2). Subsistence permits also stipulate the fishing rules for mussel collectors and line fishers at Sokhulu and Mbonambi, i.e. catch sizes and harvesting limits. Mussel harvesters at Sokhulu are allowed to harvest once a month with a bag limit of 25kg, while line fishers at Sokhulu and Mbonambi are allowed ten fish per day.

5.4.3 Outcomes of benefit-sharing arrangements in Sokhulu and Mbonambi fisheries

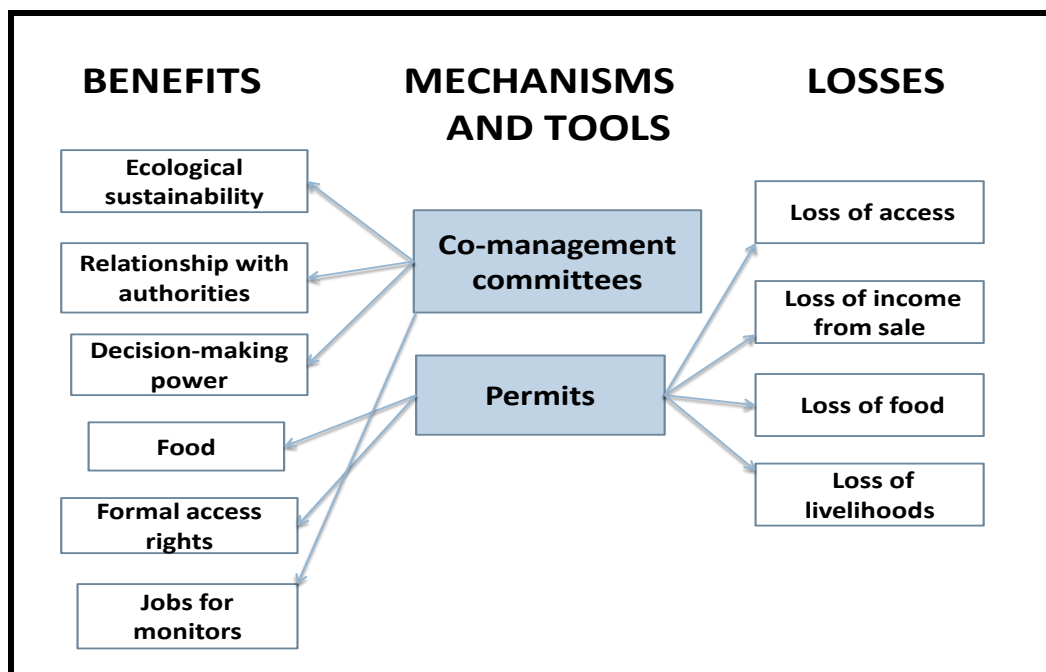


Figure 5.9: Varied perceptions of small scale fishers in Sokhulu and Mbonambi about the benefits and losses they have incurred due to the fisheries co-management arrangements and permits.

a) Benefits

Harris *et al* (2003) assert that benefits from fisheries co-management in Sokhulu outweigh the losses. The results of this study revealed that there were five main benefits that fishers in both Sokhulu and Mbonambi perceived they obtained from the co-management arrangements with EKZN Wildlife. These included: the ecological sustainability of the resources, an improved relationship with EKZN Wildlife authorities, inclusion in decision-making processes, food for subsistence, formal access rights from permits, and income provided by jobs for monitors (Figure 5.9).

Community members of the Sokhulu mussel committee gave the Mussel Co-management Project maximum ranking in terms of benefits, noting that the project has had a positive impact to their lives:

Because of co-management, mussel resources started to be conserved because in other places/communities, mussels are depleted. We were taught how to plant the mussels and this has helped improve the sustainability of the resources (SFFG 1).

The mussel harvesters and mussel committee at Sokhulu stated that when the co-management project began in 1995, Jean Harris, a staff member of EKZN Wildlife started a crafting project for women who harvested mussels in the community and established a market for them to sell their craft. The mussel harvesters remarked that they were very pleased with this initiative because it provided them with an alternative livelihood that enabled them to support themselves and their families during the times they were not permitted to harvest or when the mussel season was closed. Hence, their reliance on the resources was decreased, although this changed in 2002 when the particular staff member was no longer directly involved in the mussel project with Sokhulu mussel harvesters. Fishers in Mbonambi also noted that they benefit from the fact that formal access to the resources has enabled them to obtain a food source for themselves and their families, hence they stated, “We see permits as a benefit because they gave us freedom to harvest freely but we are still restricted” (MFFG 2).

b) Losses

Although the co-management arrangement brought about benefits that had positive impacts on the lives of fishers in Sokhulu and Mbonambi, fishers in these communities also incurred losses due to permit regulations that governed resource use. These losses included: loss of unregulated access to the fishery, loss of income from the potential sale of the resources (since permit regulations prohibit sale of resources for small-scale fishers), and a loss of traditional fishing rights which fishers believed to be part of their livelihoods.

Mussel harvesters and line fishers in the Sokhulu focus groups pointed out that although they appreciated that subsistence permits gave them legal access to harvest the resources, the major loss they incurred from the introduction of permits was increased restrictions on access to resources (SFFG 1; SFFG 2). Permits stipulate rules relating to how much can be harvested, zones for harvesting and seasons for harvesting. These restrictions were perceived by the resource harvesters to result in losses to their livelihoods due to the fact that they believed they had a traditional right to harvest the resources. Mussel harvesters in Sokhulu thus stated,

We grew up harvesting mussels but now there are people bothering us and there are rules that restrict how much mussels we can collect – this is not convenient for us at all (SFFG 3).

In addition to this, the mussel harvesters at Sokhulu indicated that permit regulations resulted in a loss of a food source because historically, they used to harvest crayfish and sea lice,

which their subsistence permits do not permit them to harvest crayfish and sea lice, mussel harvesters in Sokhulu are only allowed to harvest once a month, which is not sufficient food for them. As a result, some of the mussel harvesters interviewed at Sokhulu indicated that they still harvested crayfish and sea lice illegally. This might explain why the household survey data revealed that 74% of fishing households at Sokhulu do not possess a fishing permit. In addition to this, 34% of fishing households in Sokhulu indicated that fishing rules stipulated in the permits were not fair, while 58% indicated that they did not always comply with fishing rules. An EKZN Wildlife official stated that illegal harvesting is still taking place along the coast of Sokhulu and it has been confusing for them to determine whether subsistence or recreational fishers were responsible (EKZNW 1).

Mussel poaching in Mbonambi is allegedly problematic. Mussel harvesters in this community felt that they had lost out on harvesting the resources when co-management started because the Mbonambi community was issued with line fish permits but not mussel permits. This was because the mussel harvesters in Mbonambi were overlooked in the granting of permits to harvest mussels at the time when Sokhulu mussel harvesters obtained theirs. An EKZN Wildlife representative pointed out that there had been no documented history of the Mbonambi community's use of mussels, and as a result, no mussel resource co-management was started there (EKZNW 2). The EKZN Wildlife officials also remarked that part of the reason why the permit application for Mbonambi mussel harvesters had been delayed for so long was because of a concern that the mussel stocks at Mbonambi were too small. The EKZN Wildlife was concerned about the potential conflicts that could arise with recreational users if Mbonambi community members were given access to mussel resources (EKZNW 1; EKZNW 2; EKZNW 3). Because mussel harvesters in Mbonambi believed that they had an indigenous right to harvest mussels, they resorted to poaching the resource (MFFG 3). This had a negative impact on the sustainability of the resource and created ecological losses since mussel poachers did not harvest selectively and did not use sustainable harvesting gear. The line fish committee confirmed this, stating that the loss of access to mussel resources caused resource harvesters to become greedy, leading to depleted mussel stocks (MFFG 1).

Line fishers and mussel harvesters in Sokhulu indicated that in the past, they used to sell the resources that they did not consume with their families (SFFG 3; SFFG4). However, because permit regulations prohibit the sale of fisheries resources by small-scale fishers (unless they sell within the community boundaries, (i.e. within 20km), the mussel harvesters and line fishers believe they have lost a source of income they used to support their families. However,

one may argue that if the communities were allowed to sell the resources, it would not make a difference as there is no market for fishers in these communities to sell their catch.

An EKZN Wildlife official stated that at the inception of co-management, the conservation authorities had not paid much consideration to the broader socio-economic dynamics within the community that may have had a direct or indirect impact on the fishery (EKZNW 3). One official noted the following about the mussel project,

...We hadn't realized that one day of mussel harvesting caters for one or two meals for the harvesters. We call this mussel project food security but it's actually supplementary food security because harvesting mussels for one or two meals is not providing them food security... there is no alternative livelihoods funding for the community and no funding for employing a social science person into the program (EKZNW 3).

The findings of this study indicate that the losses that Sokhulu and Mbonambi fishers and mussel harvesters claim to have incurred from the introduction of subsistence permits, intended as a benefit-sharing tool, were mostly linked to socio-economic insecurities of the livelihoods of fisheries resource users within these communities. It appeared that there was a gap between the formulation of subsistence permit regulations and the understanding of the socio-economic status of fishers and their households. On the other hand, it also appeared that fishers in these communities expected EKZN Wildlife to play a developmental role, which is not necessarily the mandate of EKZN Wildlife. This leads to perceptions by fishers of losses, attributed to harvesting permits.

5.4.4 Institutional arrangements' influence on benefit distribution

This section explores how institutional arrangements influenced: a) how fisheries resource users in Sokhulu and Mbonambi benefited (and lost) from the fisheries sector, b) the manner in which benefits from fisheries resources have been distributed, and c) why benefits have been distributed in the manner that they were. The key themes that will be discussed in this section are decision-making (i.e. power and procedural justice), representativeness and accountability of the co-management structures, and perceptions of fisheries rules.

Focus group discussions with fisheries resource users in Sokhulu revealed that they believed EKZN Wildlife was the most central and powerful decision-making stakeholder in the fisheries sector, as it has the most power in deciding how the community should benefit from

the resources and how benefits are distributed through co-management and subsistence permits (SFFG 1; SFFG 2; SFFG 3; SFFG 4).

Figure 5.10 illustrates a network diagram produced from Venn diagrams constructed with the mussel and line fish committees at Sokhulu in the focus group meetings, and depicts their perceptions about decision-making power in the fisheries sector (SFFG 1; SFFG 2).

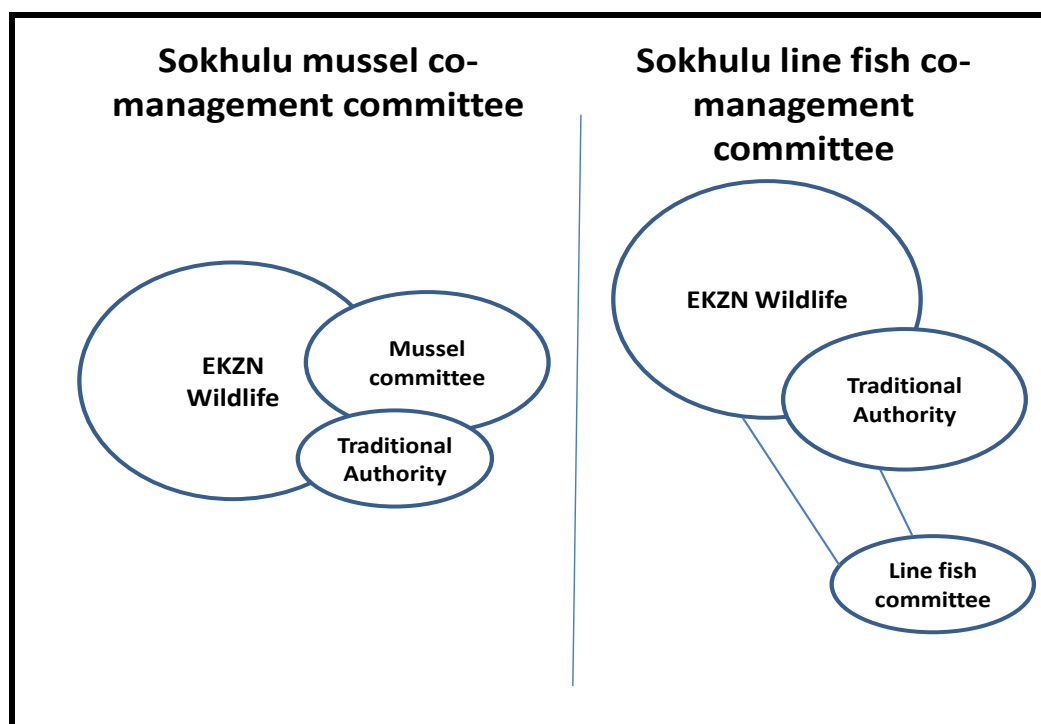


Figure 5.10: Network diagram depicting the perception of EKZN Wildlife by Sokhulu committees as the most influential stakeholder in decision-making regarding Sokhulu fisheries (SFFG 1; SFFG 2).

According to the mussel committee at Sokhulu, EKZN Wildlife has the most decision-making power about how the resources should be used and how mussel harvesters should use them. However, the mussel committee acknowledged that they, together with the Sokhulu traditional authority, work closely with EKZN Wildlife. The Sokhulu line fish committee asserted that although EKZN Wildlife has the most decision-making power in determining how fish is harvested and how benefits are distributed from the fishery, the committee's role is not acknowledged as it should be by EKZN Wildlife. The line fish committee claimed that EKZN Wildlife does not always listen to their inputs and does not financially compensate the committee for what they do. As a result, the line fish committee indicated that they do not have a close relationship with EKZN Wildlife representatives.

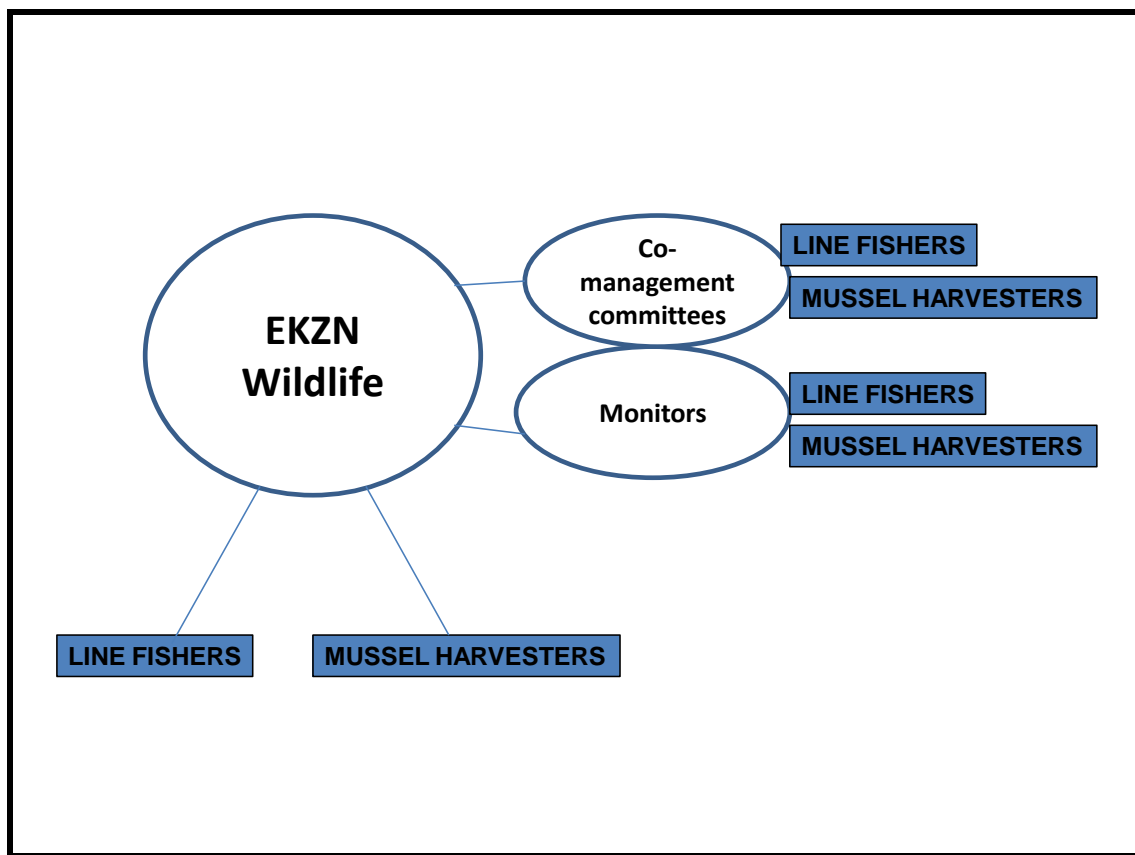


Figure 5.11: Network diagram depicting the perception of EKZN Wildlife by Sokhulu fishers as the most powerful decision-making stakeholder in Sokhulu mussel and line fish co-management (SFFG 3; SFFG 4).

In the focus groups held with Sokhulu line fishers and mussel harvesters, EKZN Wildlife was widely regarded as the controller of benefits as they were perceived to have the most decision-making power in the co-management arrangement. This was similar to the perceptions of the committee (Figure 5.11 and Figure 5.12). Both fisheries groups asserted that the co-management committees and community monitors had equal decision-making powers, but smaller than that of EKZN Wildlife. Both the committee and the monitors were perceived to have a working relationship with EKZN Wildlife (SFFG 3; SFFG 4). However, Sokhulu mussel harvesters and line fishers remarked that they themselves had no say in decision-making processes in the co-management. Although they felt that the committees and monitors involved them in their activities, they believed that EKZN Wildlife rarely included them in decision-making procedures.

Both line fishers and the line fish committee in Mbonambi also believed that it was not themselves, but EKZN Wildlife that controlled decision-making processes in the co-management of fishery resources (see Figure 5.12). Similar to Sokhulu, fishers in Mbonambi felt that EKZN Wildlife did grant monitors and the line fish committee a certain degree of decision-making power, but felt that the fishers themselves were not included in these decision-making processes. However, one may argue that this is understandable as committees are supposed to represent community members in decision-making processes and feedback to them, as not everyone can be involved in these processes.

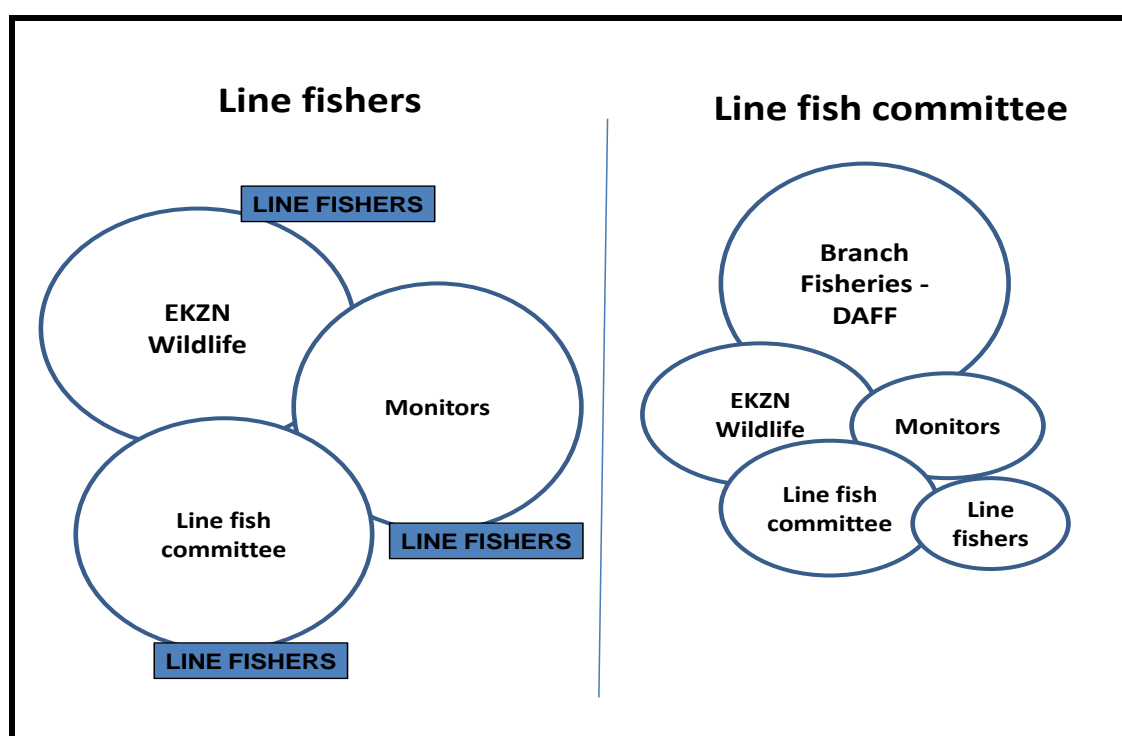


Figure 5.12: Network diagram depicting the perception of EKZN Wildlife by the Mbonambi line fishers and line fish committee (SFFG 3; SFFG 4).

Co-management committee members from Sokhulu and Mbonambi also expressed dissatisfaction that there was no compensation for the work that they did and that they did not obtain the recognition that was due to them from EKZN Wildlife (SFFG2; MFFG1).

In contrast to the perceptions of Sokhulu and Mbonambi fishers and co-management committee members, there were mixed responses about who held the most decision-making power in Sokhulu and Mbonambi fisheries co-management among the EKZN Wildlife

representatives that were interviewed. While one of the officials from EKZN Wildlife ranked EKZN Wildlife as the most powerful decision maker in the co-management structure, the other officials ranked the co-management committees that included community members as the most influential decision-making bodies in the Sokhulu and Mbonambi fisheries sector (EKZNW 1; EKZNW 2; EKZNW 3). This indicates that there was a gap between the extent to which EKZN Wildlife felt that they had included community fishers in decision-making processes, and the extent to which community fishers actually felt included and influential in the decision-making processes.

EKZN Wildlife has acknowledged these concerns, as explained by one official,

People in the committees no longer seem keen for joint management and no longer see benefits from it. They no longer see access to resources as a benefit anymore – they want more – they want bag limits to increase, they want to be paid, monitors want salary increases, etc. It has become glaringly evident that alternative livelihoods are important because people only fish because they are desperate and they can't make money (EKZNW 3).

The findings of this study affirm that there has been increasing pressure on EKZN Wildlife by fishers in these communities. EKZN Wildlife is expected not only to be a conservation authority, but also to play a role in facilitating development opportunities that would help supplement the lives of fishers and their households. When co-management started in Sokhulu, the mandate of EKZN Wildlife was work with the communities to enhance the sustainability of the resources, but over time, EKZN Wildlife has become more aware of the pressures that community fishers place on them to play a developmental role through co-management. However, an EKZN Wildlife official explained that there is not much they are able to do to assist fishers in this regard because the budget they get from the national fisheries department only enables them to facilitate conservation, and not to simultaneously play a developmental role in the fishing communities (EKZNW 1). It is therefore evident that the mismatch between the co-management objectives and fishing rules and the evolving livelihood needs of fishers in the Sokhulu and Mbonambi communities is increasingly decreasing the impact and legitimacy of co-management to the fishers. Unless fisheries co-management plays a role in facilitating the provision of alternative livelihoods to fishers or

links to other development institutions within the communities, co-management may gradually lose its effect in these communities.

5.5 The mining sector

5.5.1 The mining sector in Sokhulu and Mbonambi: actors and resources

Richards Bay Minerals (RBM) is the primary actor in the mining sector in Sokhulu and Mbonambi, as it holds rights from the Department of Minerals and Energy (DME) to mine the land in these coastal areas. Several other actors have a stake in the mining taking place in these areas, through either working with RBM in the mining operations, or representing the communities on mining related issues. Richards Bay Minerals was established by the Industrial Development Corporation, BHP Billiton and a Canadian Company known as Queensland Trustees and Investment (QTI) Limited in 1976 to mine 17km of coastal dunes in the northern coast of the KwaZulu-Natal province (RBM, 2007). The mining concession areas belonging to RBM within Sokhulu and Mbonambi TA areas are indicated in Figure 5.13.

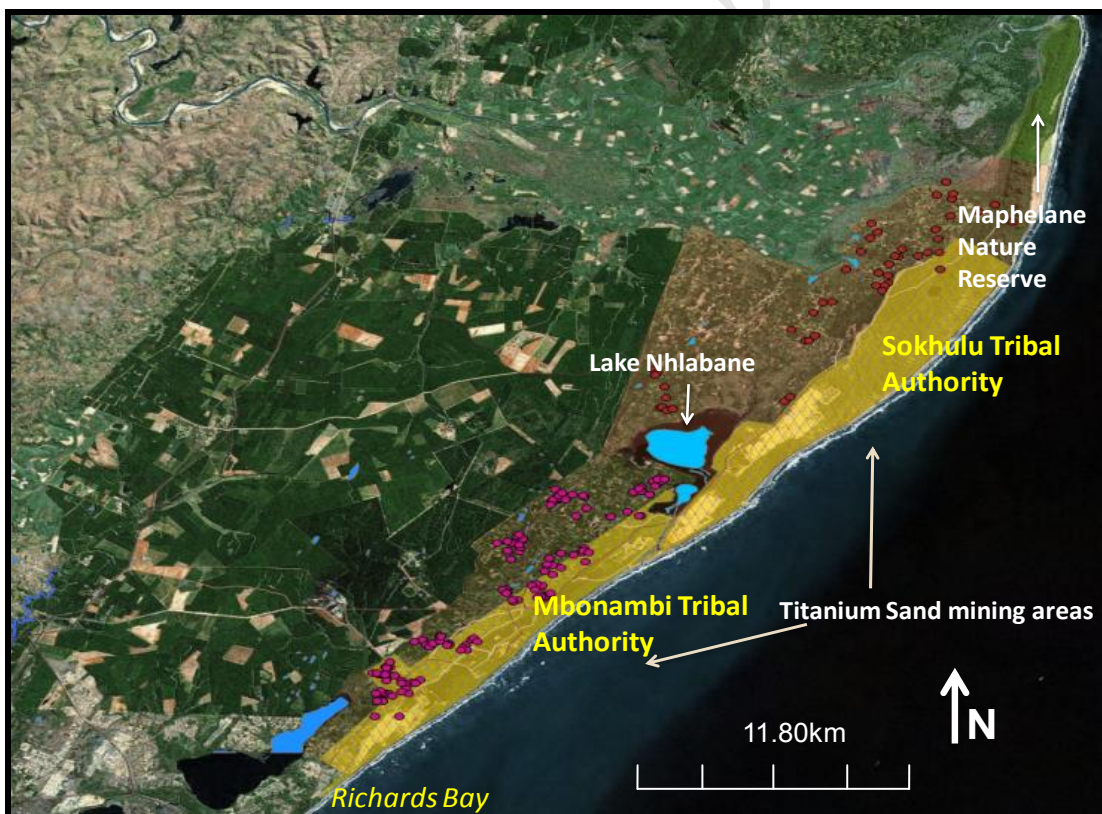


Figure 5.13: RBM mining concession areas within Sokhulu and Mbonambi.

Richards Bay Minerals is a world renowned producer of titanium slag, rutile, zircon and high purity pig iron, and started mining the coast of Mbonambi in 1976, and Sokhulu, in 2004. The mining company has ISO 9002 accreditation for quality and has established a dune

rehabilitation program on mined dunes that involves the plantation of casuarinas and indigenous forests to rehabilitate mining land and restore the ecosystems in the areas that have been mined (RBM, 2007). The company hires approximately 1,700 permanent staff members and 2,000 contractors and is now owned by Rio Tinto (37%), BHP Billiton (37%), RBM employees (2%), and a Broad Based Black Economic Empowerment (BBBEE) consortium made up of the four communities (Sokhulu, Mbonambi, Dube, Mkwanaazi), together with other investors. This means that the communities now have a stake in the company through shareholding (RBM, 2011). Due to the new regulations stipulated in the South African Mining Charter to convert old mineral rights to new mineral rights, RBM has sold 24% of its shares to the four communities adjacent to where they are mining.

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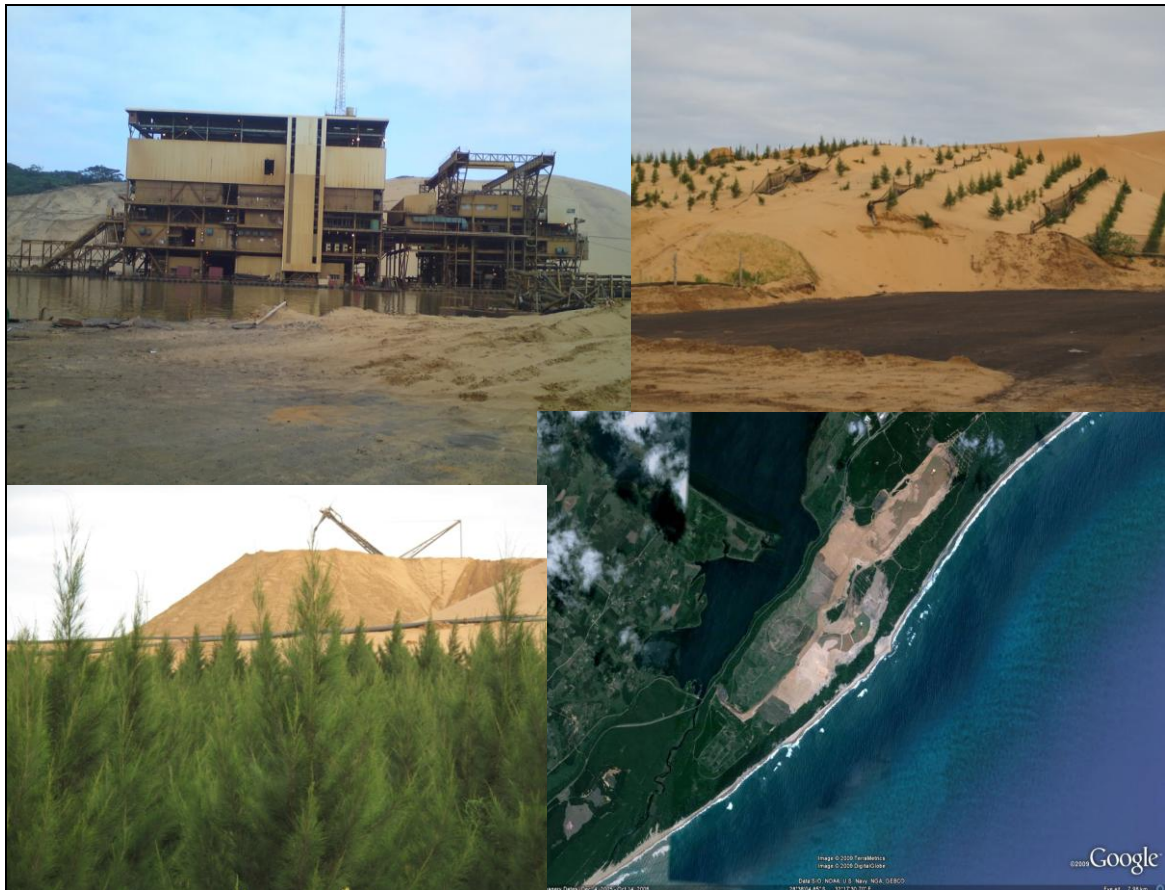


Figure 5.14: RBM mining operations at Sokhulu and Mbonambi

5.5.2 Benefits and losses from mining in Sokhulu and Mbonambi

Since mining began along the coasts of Sokhulu and Mbonambi, there have been various social, ecological and economic impacts. These have translated into benefits and losses/negative impacts incurred by adjacent communities. This section provides an account of the perceived benefits and losses emanating from RBM mining activities, incurred by Sokhulu and Mbonambi over the past 30 years.

a) Benefits

According to RBM (2009), Sokhulu, Mbonambi, Dube and Mkhwanazi communities have benefited from the presence of the mining company in these communities through Corporate Social Investment (CSI) projects including infrastructure support for schools, Treepreneur project (i.e. indigenous tree planting project), rigging training for unemployed youth, and annual donations to 24 schools in the host communities. In addition to this, RBM prides itself on building clinics as well as roads for mining operations that are now used by the communities. However, Sokhulu and Mbonambi community respondents revealed contrary

perceptions, as many of them did not agree that these benefits have made up for what has been lost due to mining in these areas. Various community members and coastal resource user groups in Sokhulu and Mbonambi indicated that they have incurred very few or no benefits but several losses to their livelihoods due to mining. Although 19% of interviewed Sokhulu households indicated in the surveys that employment in mining contributes to their household monthly income, 40% of Sokhulu households believed that mining has had negatively effected on their livelihoods. Moreover, although the survey results indicated that mining contributes to monthly household incomes of 30% of Mbonambi households, 71% of Mbonambi households indicated that mining has negatively impacted on their livelihoods. Various community groups within Sokhulu and Mbonambi that were interviewed in the focus group discussions, including fishers, farmers, and even RBM employees, also indicated that the benefits that they have received from mining were outweighed by the losses, especially ecological and social impacts. The ecological and social losses outlined by Sokhulu and Mbonambi communities are discussed below.

b) Losses

Fishers in Mbonambi asserted that RBM mining operations have disturbed the water flow and the ecological system of Lake Nhlabane due to the fact that RBM built a bridge at the mouth of the lake that blocked water to and from Nhlabane river and the sea (MFFG1, MFFG2). As a result, the lake is now closed to water inflow, and the marine life in the lake is perishing. Since RBM has been drawing water from the lake for mining operations, the water level of the lake has been dropping, especially during low rainfall seasons. Therefore, the people who fished in the lake that were interviewed for this study indicated that they have lost access to the fisheries resources in the lake, and thus have lost a means of feeding themselves and their families (MFFG1; MFFG2). Vivier and Cyprus (1999) confirm that the bridge built by RBM in Lake Nhlabane did in fact impact on the lake ecosystem. When RBM resumed mining in the Lake Nhlabane area in 1977, they realized that the lake was a natural barrier to mining. Therefore, a dredger and concentrator were built by RBM in 1993 across the middle of the Nhlabane estuary to allow for physical crossing. Two berm walls crossing the estuary were constructed as well. The berm walls were set to be removed after three months, but this ended up being delayed to May 1996, resulting in disturbance of fauna species within the estuary. This activity caused a rapid decrease in the number and density of zoobenthic species resulting from a series of sediment intrusions into the estuary from around the berm walls (Vivier and Cyprus, 1999).

Sedimentation also resulted in long term habitat changes in the estuary. In addition, water abstraction from RBM mining activities caused water and salinity levels in the lake to drop as the lake could no longer breach itself at the mouth, since it was naturally an open-closed system. Due to this, there was no mixing of the marine and lake environments for four years, and thus marine organisms were inhibited from entering the estuary. However, RBM did lift the berm walls and limited water abstraction from the lake when they were made aware of these negative impacts. A RBM official indicated that they have tried to minimize negative impacts on the lake by limiting water abstraction and by building a fish ladder for fish to move from the lake to the sea (RBM 2). However, the RBM ecologist asserted that mining activities are not the only cause of disturbance to the ecosystem, and that the commercial plantations (i.e. eucalyptus trees) planted by local people, as well as by SAPPI and Mondi companies, also consume a lot of water and cause water levels to drop. Other ecological impacts of mining have included the destruction of indigenous coastal forest. Traditional healers in Sokhulu and Mbonambi noted that mining has resulted in the destruction of indigenous and medicinal tree species that traditional healers have used for years to heal local people (SHFG; MHFG). The traditional healers expressed concern that the replacement of the indigenous forests in the area by monocultures of casuarinas caused them to suffer because they no longer have access to the tree species they used to use, and most of the tree species destroyed for mining can never be rehabilitated again, which means that they have lost their traditional links to those tree species. The outcome of losing these indigenous tree species is that they are no longer able to heal most of the illnesses, and as a result they have lost out on clients. Traditional healers in Mbonambi remarked,

Before RBM started mining in 1976, there were abundant indigenous trees and forest here at Mbonambi and we used to harvest from it but after mining began, we lost access to scarce tree species that were on the sand dunes and from then on we had to go to the chemist and buy these when we could previously just harvest it here. RBM does not recognize us and they have destroyed the forest we rely on and did not give us an alternative solution. Because mining has destroyed the forest, we can't heal all the diseases we used to heal because those trees we used are now extinct – we are sometimes even forced to go all the way to Hluhluwe to harvest tree species we can no longer find here and that travelling costs us a lot of money – now people suffer when they are sick because we can't help them as easily as we used to (MHFG).

In Sokhulu and Mbonambi, respectively, other social losses due to mining were highlighted by 40% and 71% of respondents. Fishers in Sokhulu claimed that since mining began at Sokhulu in 2004, the access routes to the coast that they had used for years have been destroyed due to mining (SFFG 1; SFFG2). Replacement routes to the coast are now too long and are controlled by RBM. There was also a common concern among resource user groups in Sokhulu and Mbonambi that the indigenous forests, as well as the graves of their forefathers have been destroyed by mining. Mining was also said to have resulted in the resettlement of some people in Sokhulu whose dwellings were located along the path of the mining operations. Mining operations have also posed major threats to community agricultural land and livestock because there is now limited land for livestock grazing. Further, water draining from mining operations has led to flooding and has destroyed some of their agricultural land and dwellings. There were also concerns among the different groups in Sokhulu and Mbonambi that mining activities have used up most of the natural water sources (i.e. streams and Lake Nhlabane) in the area, as mining operations require large amounts of water (SFFG2; MFFG1). Sokhulu farmers stated that this has impacted their livelihoods because water supply in the area is now limited, given the fact that 54% of the households obtain water from public stand posts, while others use underground water and water from rivers or streams. Reports of deaths of livestock were also noted in grazing areas destroyed for mining (SFFG3).

In addition to this, mounds of sand that are left over after mining and have not yet been rehabilitated are said to have health implications due to the dust being blown by the wind into the villages (SFFG 1; SFFG2). Other health impacts from mining pointed out by Mbonambi farmers included underground seepage of chemicals from mining operations contaminated underground water, making it unsafe to drink for local people; as well as the fact that clarifier sludge (i.e. mineral waste) dumped by RBM adjacent to the Mbonambi community causes air and water pollution, putting community lives in danger. An RBM official stated that RBM was aware of these impacts and was working towards rectifying them (RBM 2).

5.5.3 Mechanisms and tools for enhancing benefit-sharing in the mining sector in Sokhulu and Mbonambi

There have been three key drivers of benefit-sharing from mining between RBM and Sokhulu and Mbonambi communities: the Rio Tinto principles, the Mineral and Petroleum Resources Development Act (MPRDA) of 2002, and the Broad Based Socio-Economic Empowerment Charter for the South African Mining Industry (also known as the Mining Charter). Rio Tinto is one of the world's largest private mining companies, and has been subject to various criticisms over the past few decades concerning environmental, social and labor issues (Kapelus, 2002). Rio Tinto, therefore, embarked on developing a global corporate responsibility strategy which declares its principles and values and clarifies policy guidelines for the implementation of the principles to all its associate firms, subsidiaries and contractors. Part of the reason for developing the policy guidelines was to help the company build sustainable mutual relationships with host communities and to improve the access of affected communities to existing and new opportunities within the firm (Rio Tinto, 1997; Kapelus, 2002). Richards Bay Minerals has established various CSR projects within the Mbonambi community in education, health care and community development. A RBM official confirmed this, stating that both Sokhulu and Mbonambi communities currently benefit from RBM's CSR projects, providing support primarily to schools, clinics and other community projects (Kapelus, 2002; RBM 3). The establishment of local committees known as Community Development Councils (CDCs) or committees, operating alongside traditional authorities in Sokhulu and Mbonambi, has been facilitated by RBM as a mechanism for enabling the communities to benefit from CSR projects. Traditional authorities, the CDCs and RBM are involved in the implementation of CSR projects in Sokhulu and Mbonambi.

The Mining Charter and the MPRDA assert that the South African mining industry prioritizes Black Economic Empowerment (BEE), employment equity and rural development to redress the historical exclusion of blacks, mining communities and women from participation in the mainstream economy (DME, 2010). Therefore, by the end of 2009, RBM had signed binding agreements with its BBEE consortium, including seven lead investor companies, four host communities (including Sokhulu and Mbonambi), and an Employee Share Participation Scheme (ESPS), for a BBEE deal of 26% (RBM, 2009). The BBEE transaction of 26% of the company's shares to the new partners in the consortium was developed as a mechanism to share benefits between RBM, the host communities and the other shareholders. Richards Bay Minerals has put in place institutional arrangements in Sokhulu and Mbonambi communities to act as tools for distributing benefits emanating from CSR and BBEE strategies (Figure 5.15).

RBM established CDCs¹⁰ in Sokhulu and Mbonambi in order to distribute the benefits of CSR projects undertaken by RBM in Sokhulu and Mbonambi (RBM 3). In Sokhulu, this takes the form of a Youth Development Committee which represents the community in presenting community needs to RBM and advocating for community members to be employed by RBM and its contractors. At Mbonambi, a committee called the Job Seekers Committee fulfills a similar role, especially in advocating for fair employment opportunities for local people by RBM and its contractors. The channel that RBM uses to work with and distribute CSR benefits both in Sokhulu and Mbonambi goes via the TAs and the Mfolozi Local Municipality, as they both have legal administrative powers over Sokhulu and Mbonambi. However, the TAs and the Mfolozi Local Municipality have minimal interactions with each other in matters related to community leadership. During the data collection process, it was observed that RBM deals primarily with the Tribal Councils in Sokhulu and Mbonambi, in matters concerning the sharing of benefits from mining between RBM and the communities.

¹⁰ The term CDCs was used by RBM to refer to the local committees that they work with within the communities. However, for the purposes of this study, the actual names of the committees that were present in the communities will be used, i.e. Sokhulu Youth Development Committee and Mbonambi Job Seekers Committee. Members of these committees were appointed by community members in consultation with the TAs. The committees represent community needs within RBM and promote the employment of local people by RBM and its contractors.

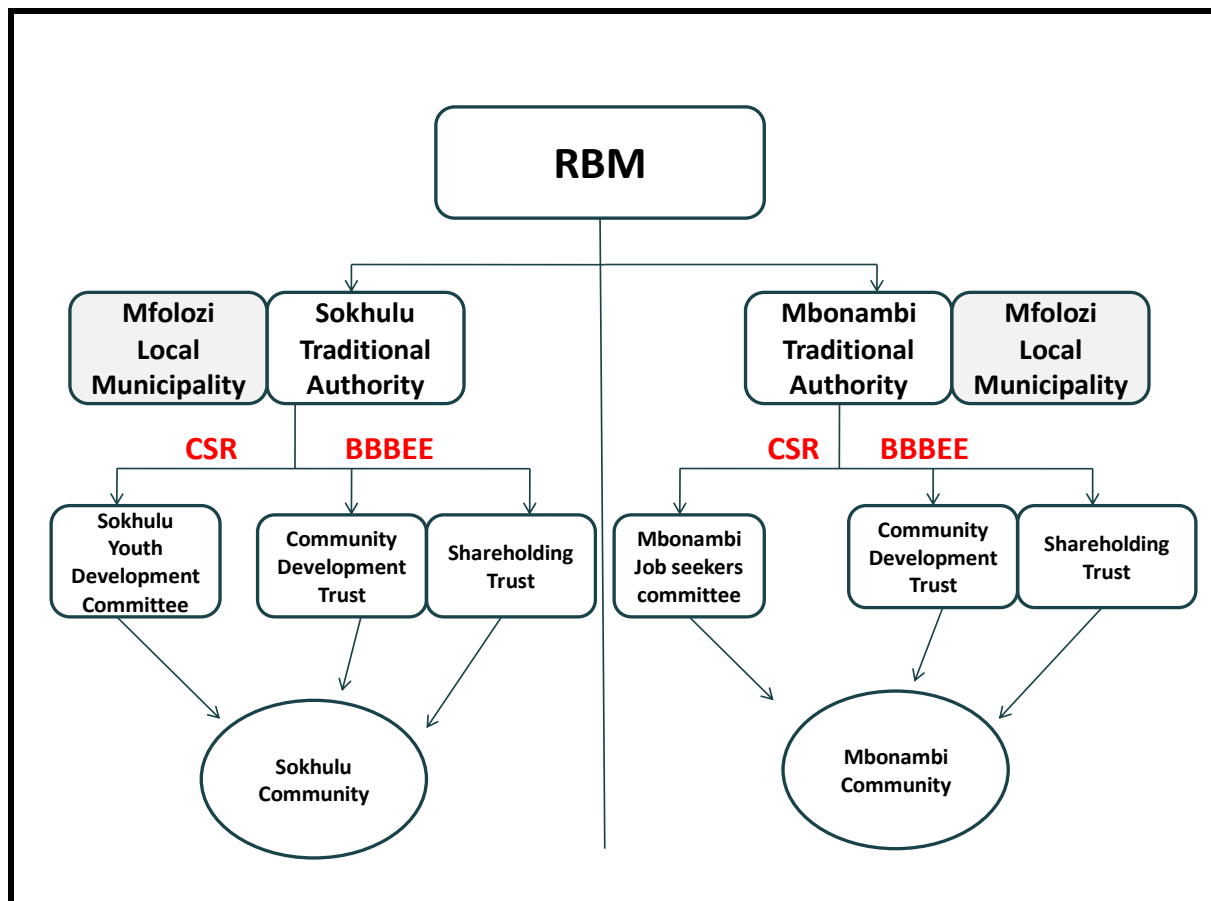


Figure 5.15: Institutional arrangements for sharing CSR and BBBEE benefits from mining at Sokhulu and Mbonambi

The local municipality is involved to a lesser extent as they have limited physical presence in these communities. In Mbonambi, the local municipality and the Mbonambi TA did not work well together, but the municipality was trying to prevent this from affecting their mandate as stipulated in the IDP (MLM 1). Therefore, the Sokhulu Youth Development Committee and the Mbonambi Job Seekers Committee, under the guidance of their respective TAs are responsible for distributing CSR benefits to their respective communities.

In addition to participating in the RBM BBBEE consortium, Sokhulu and Mbonambi communities have two Trusts that were established in partnership with RBM to distribute and manage BBBEE benefits for the wider communities (see Figure 5.15). The Community Development Trust is responsible for implementing community development strategies in each host community, while the Shareholding Trusts are responsible for managing community shares (i.e. 2.7%) in the consortium. According to an RBM official, capacity building for community representatives to participate in the consortium was provided for by RBM. The

mining company has also employed independent accountants for 12 to 18 years to administer the shareholding of the communities in the consortium (RBM 1). The Community Development Trusts and Shareholding Trusts in Sokhulu and Mbonambi work under the guidance of the TAs, and the Mfolozi Local Municipality is not involved in the BBBEE deal negotiations. The outcomes of these CSR and BBBEE benefit-sharing mechanisms will be discussed in the following section.

5.5.4 Outcomes of benefit-sharing mechanisms and institutional arrangements' influence on benefit distribution

The results of this study revealed that although RBM mining in Sokhulu and Mbonambi resulted in some benefits, several factors influenced the effectiveness of benefit-sharing mechanisms in the mining sector in these communities. Although respondents in Sokhulu and Mbonambi expressed enthusiasm upon hearing that RBM had made the effort to inject such a sum of money through the BBBEE deal into the community, they simultaneously expressed indifference to this as they expressed doubt that the benefits of this money would ever reach the wider community equitably. The DMR (2009) revealed that although mining companies in South Africa seemingly comply to implement community upliftment projects in mining-affected communities, there is a paucity of evidence that shows that the projects that are implemented by these companies match the needs of the affected communities. This is attributed to poor and insufficient collaboration and consultation with the communities, as well as a lack of alignment of the community upliftment projects proposed by the mining companies with already existing broader Local Economic Development (LED) frameworks within the communities (DMR, 2009). Various other factors were perceived by community members to block benefits emanating from RBM's CSR and BBBEE initiatives. These included political patronage of the structures responsible for distributing benefits to the wider community; lack of commitment, accountability, representativeness, and procedural justice by those responsible for distributing benefits; as well as an uneven relationship between RBM and community members.

According to RBM representatives, Sokhulu and Mbonambi communities have benefited significantly from CSR and BBBEE initiatives. One RBM official asserted that RBM employs 700 permanent employees and 1,000 contractors from the host communities (RBM 1). The shareholding of each community held by the Shareholding Trusts in the consortium is worth R338 million (RBM 1). From the BBBEE transactions, RBM has paid R17,5 million

endowments each to Sokhulu, Mbonambi and the two other host communities for community development, in order to uplift and benefit these communities. In addition to this, triple dividends of R1,5 million will be paid twice each year after these R17, 5 million endowments (RBM 1). Although the communities are not allowed to sell these shares, RBM has projected community dividends to increase to between R30 million – R100 million by 2020, so that when mine closure takes place in 2034, the communities would have made enough profits for intended community development projects.

In Sokhulu, the general community perception of RBM's benefit-sharing strategies is that they are not satisfactory. Household survey results of this study revealed that 96% of the community members were aware of RBM's benefit-sharing-mechanisms within the community, particularly the CSR projects. However, because at the time this research was undertaken, the BBBEE deal between RBM and the community was still new, community members both in Sokhulu and Mbonambi were generally not aware of it. People interviewed highlighted the losses rather than benefits they have incurred from RBM's presence in the community, and thus most provided suggestions of what they think RBM should be doing in order to benefit the community more. For example, it was suggested that RBM should provide more jobs to the people in the community. The survey results revealed that RBM, including its contractors, only hired people in 13% of the Sokhulu households, mostly in low skilled jobs.

In the focus group discussions held with members of the Sokhulu Youth Development Committee and community members employed in mining operations, it was revealed that Sokhulu community members were aware of and acknowledged benefiting from RBM through renovated schools, employment, roads built by RBM and youth soccer tournaments sponsored by RBM. However, these benefits were not seen as adequate by most community members. The Sokhulu Youth Development Committee asserted,

They (i.e. RBM) do not build schools in the community – they only renovate but they still put the big boards to say it is an RBM school. They advertise themselves as though they do a lot for the community...for the amount of money they make, they do nothing for the community. Local benefits are too little – very small – compared to what they are getting (SMFG 1).

In contrast, the Sokhulu TA representative interviewed for this study asserted that the Sokhulu community was definitely benefiting from RBM's benefit-sharing strategies. During the time when the data for this study was collected, only the Sokhulu TA, the Sokhulu Councilor, the Sokhulu Youth Development Committee, as well as people from the community that were employed in the mining sector indicated that they were aware of RBM's BBBEE deal that involved the community. During conversations with general community members, most noted that they were not aware of this deal or the R17,5 million endowment that RBM had just paid to the community, while some community members had only read about the payment of the endowment from local newspapers. Thus it became apparent that the TAs had not properly informed the community about this initiative.

Community members in Sokhulu shared the view that they were unhappy about the fact that RBM only has a direct relationship with the TAs and not the wider community. Community members were under the impression that no matter what benefits RBM conveyed to the community, the TA would control these benefits and decide who in the community could access benefits. Sokhulu mining sector employees remarked,

RBM does something wrong by directing all benefits they have for the community to the tribal authorities – they should address what they are doing to the community as a whole because now the benefits never reach the whole community and only the people affiliated with the traditional authorities end up benefiting...there is a big gap between the benefits that RBM gives to the community and the amount of these benefits that actually reach the community on the ground (SMFG 2).

A common view expressed was that the TA and the community structures affiliated to it were a blockage to benefit-sharing between RBM and the wider community. Consequently, the community members felt that they were negatively impacted by RBM's benefit-sharing mechanisms because of the TA, because the TA blocked mining benefits from reaching the wider community. The Sokhulu mining sector employees also pointed out that because the Sokhulu Youth Development Committee was influenced by the TA, they sometimes inequitably decided and showed favoritism with regards to which community members should be employed by RBM when RBM mandated them to recruit a certain number of community members (SMFG 2). During the time spent in the community, there were rumors circulating

that the Committee members accepted money for bribes from community members in exchange for jobs at RBM or RBM contractors.

Kapelus (2002:289) concluded that the Mbonambi community enjoyed “relatively generous benefits” from the presence of RBM and the CSR strategies it implemented within the Mbonambi TA and states that Mbonambi’s relationship to RBM made the Mbonambi community an “island of development” in the UThungulu District, which he termed “a sea of underdevelopment”. However, the results of this study show that there is a gap between RBM’s and Kapelus’ (2002) perceptions of the benefits from RBM’s CSR strategy received by the community, and the actual benefits perceived by the community members on the ground. In Mbonambi, 95% of household survey respondents indicated that they were aware of RBM’s CSR projects (as the BBBEE deal had not yet been signed by Mbonambi at the time that the household surveys were undertaken). The mining sector contributed to the monthly household incomes of about 30% of Mbonambi households. Mbonambi mining sector employees also noted that the Job Seekers Committee had facilitated the benefits of local people by RBM because they forced RBM to hire more people from within the community. One RBM official confirmed that entrepreneurs within the host communities are the ones that benefit mostly from RBM, and that ordinary community members do not get many benefits (RBM 1).

Apart from these benefits, there was a general sense from the wider Mbonambi community that they were either not benefiting from RBM’s benefit-sharing mechanisms or that the benefits were not adequate in comparison to the wealth associated with RBM. For instance, 54% of the household survey respondents who indicated that they benefit mentioned that they were not satisfied with the benefits they were obtaining, while a further 77% of all the respondents in the household surveys indicated that they do not benefit at all from RBM or its benefit-sharing mechanisms. Although the reasons were not explicit enough to comprehend, there appeared to be certain factors that influenced or contributed to them, i.e. the turbulent relationship between RBM and the Mbonambi community and its leaders, as well as the perceived lack of accountability by community leaders to the wider community. It was thus apparent that like Sokhulu, RBM’s benefit-sharing mechanisms in Mbonambi did not necessarily have negative impacts on the community, but it was rather these aforementioned factors that acted as blockages to benefit-sharing and distribution.

In 2008, for instance, a conflict arose between RBM and the Mbonambi community. Some community members staged a march to RBM offices and barricaded roads, asserting that RBM wanted them to sign the BBBEE deal so that certain black RBM executives would benefit and get the money (RBM 1; PMG, 2010). In addition, community members at Mbonambi expressed discontentment that RBM was not doing enough for their community, and that RBM advertized itself as a socially responsible company when what they had done for the community had been mediocre. As a result, RBM charged the Mbonambi community with character defamation and the community lodged an interdict to close the BBBEE deal. Richards Bay Minerals subsequently won the court case as the community was found guilty of character defamation and was ordered by the court to pay for damages. Although RBM officials that were interviewed asserted that the conflict was resolved in September 2008, this court ruling may have created more friction in the relationship between the Mbonambi community and RBM (Parliament, 2010). Although this may be the case, RBM did not reverse the BBBEE deal, which the Mbonambi community signed the deal at the end of 2009. However, there have been suspicions of businessmen from outside the Mbonambi community involved in the BBBEE deal and liaising with some community leaders (Parliament, 2010). These suspicions were restated during the research, with one key informant noting that the BBBEE deal had attracted a lot of shrewd business people in Mbonambi, such as entrepreneurs from Johannesburg, Dubai and other places (RBM 1). Observers noted that this occurred because Mbonambi no longer had strong leadership since the former traditional leader had passed away in 2005. The community had thus become dismantled and vulnerable to outsider influence about how benefits coming to the community should be controlled (RBM 1).

When it comes to decision-making processes about the distribution of benefits from mining, mining employees in Sokhulu pointed out that the wider Sokhulu community is completely excluded from decision-making processes between RBM, the TA and the Councilor, as well as the Youth Development Committee. Figure 5.16 illustrates this perception by Sokhulu mining sector employees and shows that community members felt excluded from decision-making processes about sharing benefits from mining as RBM and its community institutions were not transparent in decision-making matters. However, Figure 5.17 shows that although the Sokhulu Youth Development Committee did admit to the fact that RBM is not transparent to the wider community, there appeared to be a mismatch between the way they perceived themselves and the TA's relationship with the community with regards to decision-making, as

opposed to the way the community perceived them. Figure 5.16 shows that the community members felt there was no accountability and transparency by all the decision-making structures, including the Committee and the TA. In contrast, the Committee claimed that they and the TA work closely with the community, and RBM is the only one that does not involve the community. However, the survey results of this study revealed that 44% of Sokhulu respondents who were aware of the committee felt that the committee did not fairly represent the interests of the community.

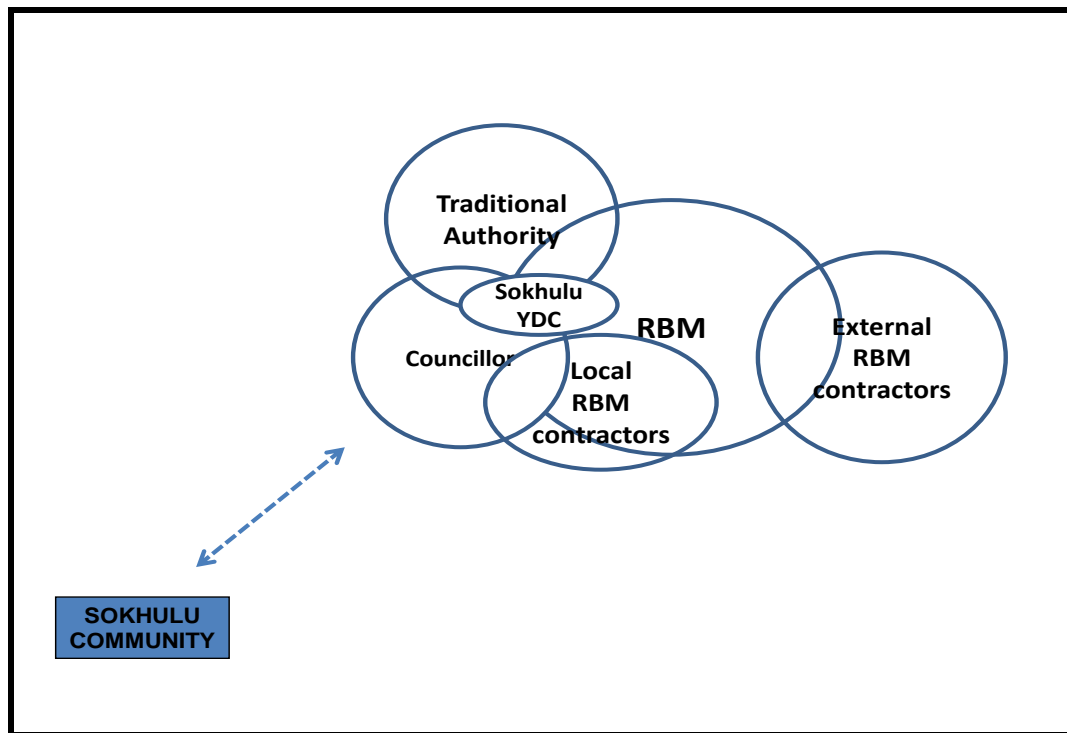


Figure 5.16: Perceptions of Sokhulu mining employees about decision-making power in mining sector benefit-sharing mechanisms

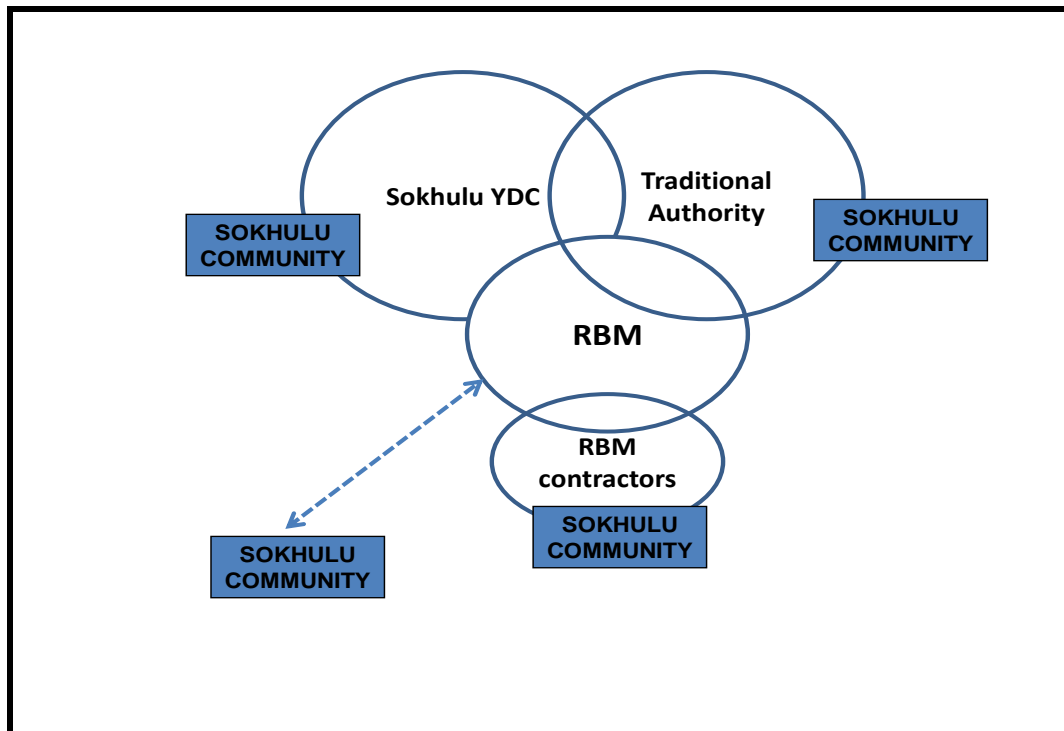


Figure 5.17: Perceptions of Sokhulu Youth Development Committee about decision-making power in mining (The dotted arrow indicates that the group perceived that the relationship between the wider Sokhulu community and the community decision-making structures is strong, but the relationship between the wider community and RBM is weak)

The Mbonambi Community Trust raised concerns that RBM only liaised with the TA and undermined the Community Trust's powers as a prominent decision-making body in the community (MMFG 1). Figure 5.18 illustrates the perception of the Mbonambi Community Trust that RBM sits at the centre of decision-making processes and has the most power. The Mbonambi Community Trust referred to RBM as 'the beast', implying that RBM did as they pleased in the area and benefited the community only if it was efficient to them and could not be told otherwise (MMFG 1). A recent government report on economic development in Mtubatuba and Umhlathuze Municipalities revealed that provincial government in KwaZulu-Natal noted concerns that RBM has been reluctant in giving local businesses opportunities significant shareholding in the mine. Moreover, there had been concerns by the community members that RBM does not adequately consult with the community on decision-making matters (Parliament, 2010).

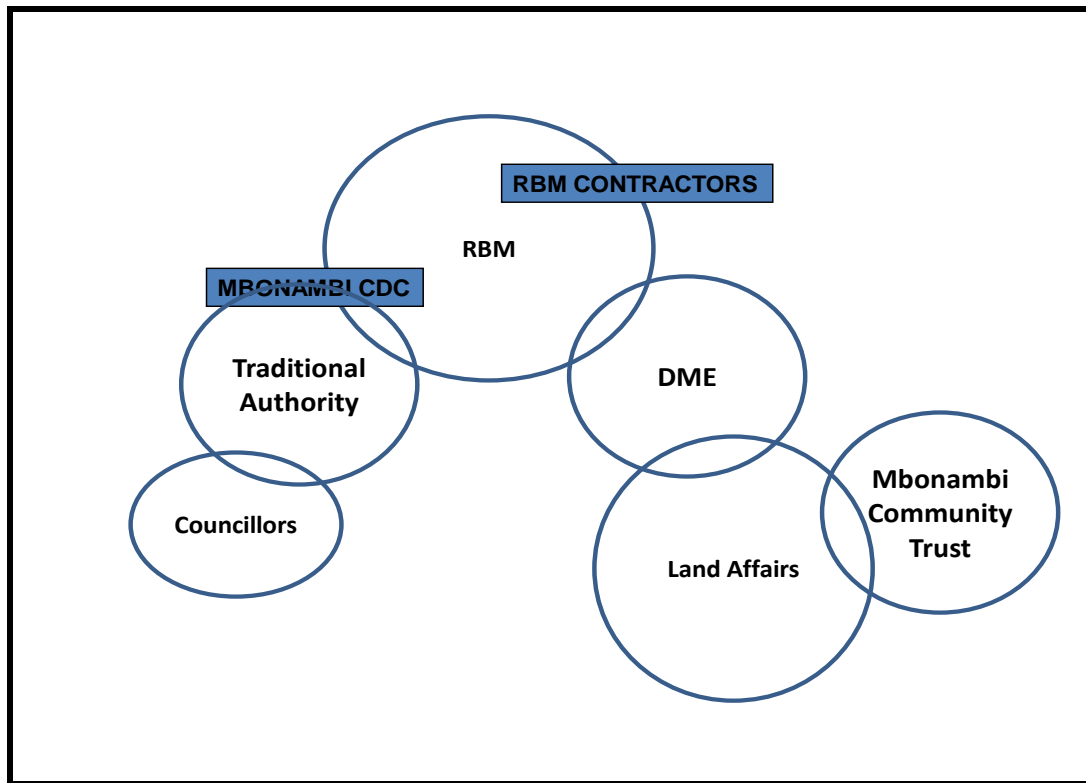


Figure 5.18: Perceptions of the Mbonambi Community Trust about decision-making power in mining

An RBM official responded to these criticisms by stating that it is not within RBM's mandate to consult with everyone in the community, but it is the job of the designated committees and BBBEE Trusts to communicate RBM's benefit-sharing mechanisms and processes to the wider communities (RBM 1). On the other hand, a local municipality representative in Mbonambi revealed that there were underlying factors outside the control of RBM that blocked benefits from mining from filtering through to the wider community in Mbonambi (MKI1). The municipality representative accused the Mbonambi TA for hardly consulting with himself or the wider community on decision-making matters, especially the ones involving benefits to the community from the interventions of RBM and other stakeholders. He asserted,

There are a lot of things the community does not know and is not told about, e.g. incentives received by the community from different industries operating at Mbonambi, i.e. RBM, Siyaqhubeka, Mondi and Sappi, as these industries plough something back to the community...I don't know anything about the BBBEE deal because issues concerning money are negotiated behind closed doors by the TA and my suspicion is that all

incentives meant for the community drown in the hands of the TA (MKI 1).

Two broad conclusions can therefore be drawn. First, although the Sokhulu and Mbonambi communities acknowledged RBM's efforts to benefit the community, their concern is that the benefits do not filter down to the wider communities due to issues of unaccountability of community leaders. The communities held RBM partly liable for allowing this to happen by giving the TAs and the Committees autonomy over the benefits and their distribution. Community members felt that this was largely attributed to the fact that neither the TAs nor RBM adequately involved the wider community in decision-making processes about benefit-sharing strategies. Hence, the DMR (2009) asserts that, "the disjuncture between consultation and collaboration with affected communities minimizes the developmental impact of the mining industry on communities". Moreover, the unstable relationship between RBM and the Mbonambi community also undermined benefit distribution and negatively impacted the community's perception about RBM's interventions within the community. It is also apparent that the perceived lack of downward accountability of mining committees and TAs to the wider community, the use of political patronage by community leaders and RBM's failure to follow up on these structures perpetrated the negative view that the communities members have against RBM, aggravating the conflicts between RBM and the communities.

Second, there seem to be many institutional arrangements put in place by RBM within Sokhulu and Mbonambi for benefit-sharing. For instance, the Youth Development Committee, TA, Community Development Trust and Shareholding Trust are all community institutions in Sokhulu with whom RBM works. Each of these institutional structures, except TAs, have a different mandate so structures work separately from each other even though they all operate under RBM. For instance, the Youth Development Committee and the Community Development Trust have community upliftment roles but use separate benefit-sharing strategies, i.e. CSR and BBBEE, and thus they do not work together. One could argue that multiple benefit-sharing mechanisms are blockages in themselves as they confuse community members as to who is actually responsible for distributing benefits.

5.6 Conclusion

The findings of this study show that coastal resources have brought various ecological, social and economic benefits to the people in Sokhulu and Mbonambi communities, through the fisheries and mining sectors. However, it is apparent that these benefits have been paralleled by significant losses that negatively impact the livelihoods of these communities. For instance, although fisheries co-management in Sokhulu and Mbonambi resulted in perceived ecological benefits as it enhanced the sustainability of the resources, fishers in these communities pointed out that the fishing regulations that were introduced alongside co-management have imposed losses to their livelihoods, as their ability to harvest resources is now restricted, putting pressure on their livelihoods as they struggle with food security. Furthermore, although 30% of households in Mbonambi received monthly incomes from employment in mining, people in both Sokhulu and Mbonambi communities expressed concern that the benefits they obtain from the mining sector are outweighed by the losses and the negative impacts that they have incurred due to mining. It is apparent from the findings of this study that flawed institutional arrangements for benefit distribution in the fisheries and mining sectors in both communities, have impinged on the ability of the communities to realize benefits emanating from these sectors. Disregarding community livelihoods, political patronage and lack of accountability by those responsible for distributing benefits to the wider communities were among the major perceived blockages to benefit-sharing in the fisheries and mining sectors in Sokhulu and Mbonambi, resulting in a mismatch between benefits intended for communities through benefit-sharing mechanisms, and the actual benefits that reach the wider communities.

MANKOSI CASE STUDY

6.1 Introduction

The Eastern Cape comprises some of the country's poorest coastal communities, characterized by high population, unemployment and poverty rates (Ashley and Ntshona, 2003; Department of Social Development, 2009). This chapter provides an in-depth socio-economic profile of people in the coastal community of Mankosi, as well as the background of coastal resource use by people in these communities. The benefits obtained by local fishers from fisheries and tourism are also described, together with a review of factors that enhance or hinder benefit-sharing in this community.

6.2 The background of Mankosi community and coastal resource use

This section provides a summary of some of the key events that have occurred over time that have impacted the manner which the Mankosi community has benefited from the use of and access to coastal resources. Because there was limited information available about the background of the Mankosi community and its use of coastal resources, this study sought to uncover the history of the community and its use of coastal resources through PRA exercises. This information was triangulated with information from the household surveys and key informant interviews and other relevant documentary evidence¹¹. Figure 6.1 provides a timeline of key events or interventions perceived by coastal resource users in the community to have affected the manner in which they have accessed and used resources.

People in the community have a long history of utilizing the coast and its resources. In the focus group discussions, some of the oldest community members asserted that they had harvested fisheries resources well before the 1940s (MFF1; MFFG3). It also appeared that there had been a strong historical link between fisheries and tourism activities even before the 1950s (MFFG1; MTFG). Raemaekers (2009) confirms that tourists in the Transkei coast have historically created a demand for most marine resources.

¹¹ Due to the limited information available on small-scale fisheries in Mankosi, the findings of this study were triangulated with information from Raemaekers (2009) for validation.

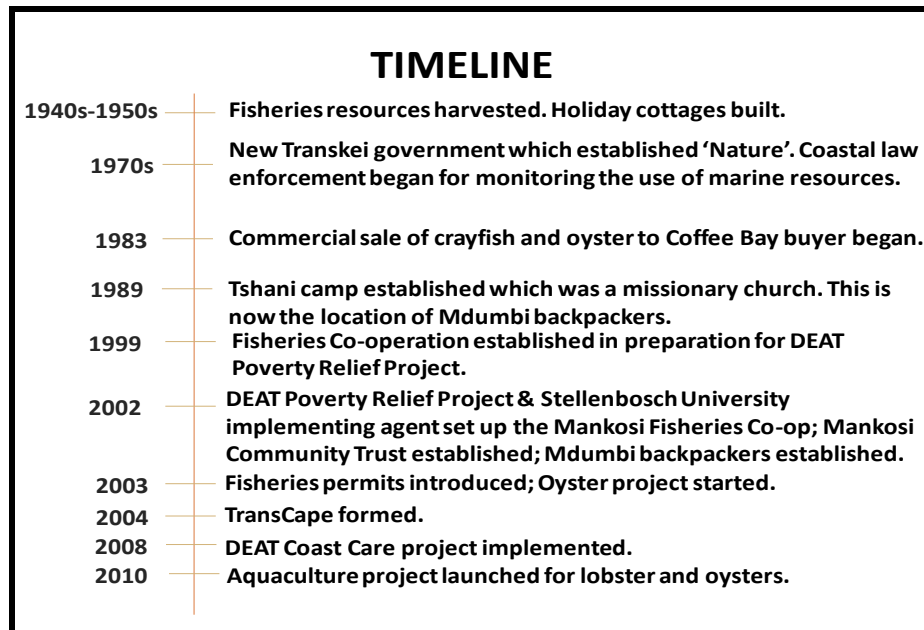


Figure 6.1: Key events that have influenced the use of coastal resources in Mankosi

In the 1950s, white people began to build cottages along the Mdumbi beach and provided seasonal jobs and a market for local fishers (MFFG1; MTFG). Fishers at Mankosi expressed no memory of fisheries law enforcers that controlled how the fisheries resources were used and harvested at the time. By the early 1970s, fisheries resources were allegedly abundant and there was traditional communal open access to the fishery (MFFG3). Fishermen at Mankosi stated that fishing was a very important community livelihood at that time, although it had limited commercial value to them because they were not educated about money and thus they were not conscious about the prices for which they sold the resources (MFFG3). However, the effects of the apartheid regime intensified after Transkei independence in 1976, as the state began buying out white businesses in the Transkei region (Fay *et al*, 2002). This resulted in the Anchorage Hotel being handed over to the black government designated to the Transkei area by the apartheid government. Fishers in Mankosi stated that the transfer of ownership of the Anchorage Hotel from white to black management caused local fishers to lose out on the market that they had obtained from the white people and tourists who used to visit the area because the black government hotel managers had no interest in consuming or buying fisheries resources (MFF1).

Local fishers reportedly suffered even further in the mid-1970s because when the black Transkei government came into effect in 1976, it introduced coastal law enforcement police

(which local people referred to as ‘Nature’¹²), who began to monitor the manner in which local people harvested coastal resources (MFFG1). New fisheries resource use rules were introduced, stating that local people had to obtain recreational fishing permits in order to have access to fisheries resources. This allegedly had a negative impact on local fishers because they could not afford to buy the permits, and as a result only white fishers had formal access to coastal resources because they could afford to buy permits at the time. Consequently, fishers at Mankosi were deemed illegal harvesters by the government and fisher access to the resources was reduced as they were scared of being caught by ‘Nature’ at the beach if they were found fishing without permits. As a result of this, local people poached and sold marine resources at night or at times when ‘Nature’ was not patrolling (MFFG1). Fishers in Mankosi remarked:

In 1976 when the new government came into effect, conservation police lived on the coast and said we were supposed to have permits to harvest resources. We needed permits not just to harvest resources but also to have access to the sea but we couldn’t buy them because they were too expensive. Only white people could have access to the coast and resources because they bought permits at post office. So we would harvest illegally. We also couldn’t sell anything because it was illegal, so we just fished for food (MFFG 1).

The enforcement of coastal resource use rules was said to intensify even further in the 1990s, as the Transkei government reportedly implemented a law¹³ that prohibited the establishment of settlements by local people within two kilometers from the high-water mark and inland, and some people in Mankosi who already resided within the two kilometer boundary were said to be removed by government law enforcers, with the exception of white people that had cottages along the coast (MFFG1; MFFG3). Local fishers then had begun to go to Coffee Bay to sell their catch to a commercial buyer. The buyer at Coffee Bay taught Mankosi fishers and others how to value fisheries resources commercially and how to price them (MFFG1; MFFG2). However, the majority of fishers did not possess recreational or other permits for harvesting.

During the early 1990s, marine resource stocks had allegedly decreased due to increased numbers of people harvesting and selling these resources (MFFG1). However, at the end of the apartheid era in 1994, Mankosi fishers claimed that their access to marine resources

¹² ‘Nature’ is a term used by people in Mankosi to refer to government nature conservation authorities.

¹³ Transkei Environmental Conservation Decree 9 of 1992.

increased again as law enforcement along the coast decreased and there were more tourists coming back into the area, providing a market (MFFG2). In addition, the resource stocks (i.e. oyster and lobster in particular) had allegedly increased again and local people started making money by selling these resources to tourists (MFFG2). However, by 2001 (i.e. after the promulgation of the MLRA in 1998), MCM introduced the first fishing regulations for local fishers and required all local fishers to possess subsistence permits to access small-scale fisheries resources. These were issued by the then DEAT (MCM) in an effort to formalize subsistence fisheries practices. This reportedly changed people's access to the resources as the permit regulations placed limits on how much local people could harvest, as opposed to harvesting as much as they wanted (MFFG2). The permits restricted the harvest to 25 oysters, 30 mussels and eight crayfish a day during the legal season. In addition, MCM regulations later stipulated that tourists or tourism facilities should also possess permits to buy fisheries resources from local fishers (Raemaekers, 2009). Community Monitors were then introduced by MCM to monitor local people's catch. The MCM Compliance Officers were also employed to monitor adherence to permit regulations. Thus, the regulation, monitoring and enforcement of access to marine resources intensified over this time.

In Mankosi, a Fisheries Co-operative (Co-op) was established in 1999 by DEAT as part of a Poverty Relief Project, in partnership with an implementing agent from Stellenbosch University. This was in preparation for the introduction of the aquaculture project for fishers in 2002 in Mankosi and other surrounding fishing communities. The year 2002 also saw the establishment of the Mdumbi backpackers within the Mankosi TA, attracting more tourism into the area. Although the owners of the backpackers initially sought to establish a facility to boost tourism in the area, local people began to come to them seeking help for various social and health issues (MKI4). Due to the realization by the backpackers owners that the community lived in vulnerable social conditions and that there was no adequate involvement by the government to assist, the owners of the backpackers took it upon themselves to team up with a locally based doctor and established a non-profit organization (NPO) called TransCape, with the aim of assisting the community (MKI4).

TransCape sources funds from tourism at the backpackers as well as from international donors to assist the community with resources, employment, capacity building, and other skills so that they can improve their livelihoods (TransCape, 2008). The aim of TransCape is to help develop the Mankosi area and its surroundings in an eco-friendly way that will benefit the

community, and as a result, they have implemented various projects and sponsored projects within Mankosi to help uplift the lives of the local people and local fishers. These projects include an Education Centre, TransCape micro-finance to local entrepreneurs, an HIV/AIDS prevention program, and village based accommodation for tourists on the hiking trail from Port St. Johns to Coffee Bay, to name but a few (TransCape, 2008). The establishment of the Mdumbi backpackers in Mankosi not only contributed to the social conditions of the people in the community, but also created a market for local fishers, as they began to sell their catch to the backpackers. For instance, Raemaekers' (2009) study in Mankosi in the 2007/2008 crayfish seasons revealed that a total of 159 different lobster fishers brought their catch to sell at the backpackers because the Mdumbi backpackers is the first available market for fishers in Mankosi.

In the same year the Mdumbi backpackers was established, the Mankosi Community Trust was formed through European Union (EU) funding obtained via DEAT. The purpose was to administer all community development initiatives, including the aquaculture project. The aquaculture project was worth R2 million and a number of community members were employed in the construction of the shellfish holding facility (Raemaekers, 2009). However, the facility remained dormant after it was built. Community members claimed that this was because electricity was never installed within the facility (MFFG1; MFFG3; MKI6). However, according to Raemaekers (2009), the holding facility never took effect due to uncertainties about the sustainability of the facility, as previous research showed that the number of permits and bag limits allocated to the Mankosi and surrounding fishing communities would not make the facility economically sustainable. In 2003, an oyster project (which involved primarily women) began. A commercial buyer started buying oysters (and sometimes lobster) from local women at market prices in 2004, and the shellfish holding facility was used at the trading point between the women and the buyer¹⁴. The oyster project later came to an end when the buyer stopped buying (MFFG1; MFFG3; MKI6).

Despite the lack of success of the aquaculture project at the time, and the fact that the Fisheries Co-op was dissolved by DEAT because they had not carried out the work they were supposed to do due to reported conflicts that occurred among the members, Mankosi fishers stated that there had been several lobster commercial buyers licensed by MCM since 2005

¹⁴ This buyer was a company called Mbasa Sea Farms (Pty) Ltd. The company traded with communities in Hamburg and Mankosi at the time (S. Raemaekers, pers. comm., 2011).

that were buying from Mankosi fishers at market prices (MFFG1; MFFG3). Community fishers, with the help of the TA and MCM, had been given the liberty to choose the buyer that they wanted and MCM gave permission to several commercial fisheries companies to convince communities to supply lobster exclusively to them (Raemaekers, 2009). As a result, by 2008, the Mankosi community lobster fishers, together with 12 other communities along the Transkei coast, signed a contract with Live Fish Tanks (Pty) Ltd., as the communities' chosen exclusive lobster buyer (Raemaekers, 2009). In 2010, the restructured national Department of Environmental Affairs (DEA, formerly DEAT¹⁵) finally managed to launch the aquaculture facility and installed it with electricity. The DAFF Branch Fisheries department (formerly MCM) licensed Live Fish Tanks (Pty) Ltd, as the chosen lobster buyer by the Mankosi community for 2010, to run the facility and purchase live and dead lobster, as well as oysters, from the community and others licensed with the company. In addition to the aquaculture project, DEAT, in conjunction with a local Coastal Working Committee along the Transkei coast, implemented a coastal conservation project called Coast Care in 2008, employing local people in the cleaning and maintenance of the coast. These institutions hired subcontracting companies to implement the Coast Care project and hire local people.

The history and background of the Mankosi community and their use of marine resources provided in this section has provided an understanding of the context of resource use in this community, and a foundation for the next section which looks at the benefits and losses from the fisheries sector in Mankosi in more detail and, the role played by the tourism sector.

6.3 Socio-economic status of Mankosi

The Mankosi community exists within the Wild Coast region and is situated within the Nyandeni Local Municipality, which is one of eight local municipalities within the O.R. Tambo District Municipality (Ashley and Ntshona, 2003). The O.R. Tambo District Municipality covers an area of 15, 946 km² and is located on the eastern coast of the Eastern Cape province, stretching from the Mbhashe river in the south to the Mthavuna river on the KwaZulu-Natal border (O.R. Tambo District Municipality, 2008). The District is the least socio-economically developed in the province, and includes 27% of the province's population, high unemployment levels (68% of economically active population) and the highest poverty levels (72% of the population live in poverty), in the Eastern Cape (Eastern

¹⁵ After the 2009 national government elections, DEAT changed to DEA, and MCM changed to DAFF – Branch Fisheries

Cape Department of Social Development, 2009; O.R. Tambo Municipality IDP Review, 2010/11). In 2007, the poverty gap (i.e. the amount of income that would be required to bring every poor person exactly above the poverty line) within the O.R. Tambo District was R2, 6 billion. The majority of this District is rural and there are low education and literacy levels, placing the people in this region in a marginalized societal position (O.R. Tambo District Municipality, 2008; Department of Social Development, 2009). This is consistent with the fact that the Eastern Cape as a whole is one of the poorest provinces in South Africa, containing approximately 27% of the country's ultra poor population (Department of Social Development, 2009).

The Nyandeni Local Municipality is also considered a poverty stricken area and it is primarily rural, with 79% of households living in traditional settlements (Nyandeni Local Municipality, 2010). The key priority of the Nyandeni Local Municipality is to promote poverty alleviation through Local Economic Development (LED), which is a strategy that involves attracting new investments in key local sectors, providing support to Small, Medium and Macro Enterprises (SMMEs), as well as promoting agriculture, farming and tourism development (Department of Social Development, 2009; Nyandeni Local Municipality 2009/2010 IDP Review). The population of this municipality is estimated at 314, 273 people, and the total household numbers in Nyandeni at 56, 851 people (Nyandeni Local Municipality, 2010).

The Mankosi community occurs south of the Nyandeni Local Municipality, in Municipal Ward 26 (Figure 6.2). The Mdumbi and Umtata Rivers act as geographical boundaries between Mankosi and its neighboring communities. The homesteads in Mankosi are located immediately along the coast. The Mdumbi backpackers lodge, several holiday cottages, as well as the Anchorage Hotel are the key tourism facilities within the area. Other major land uses in Mankosi include TA land (under the administration of the headman on behalf of all the households in the TA area), coastal land governed by the provincial environmental affairs department (DEDEA), conservation land, indigenous forests, agricultural land and grazing land.

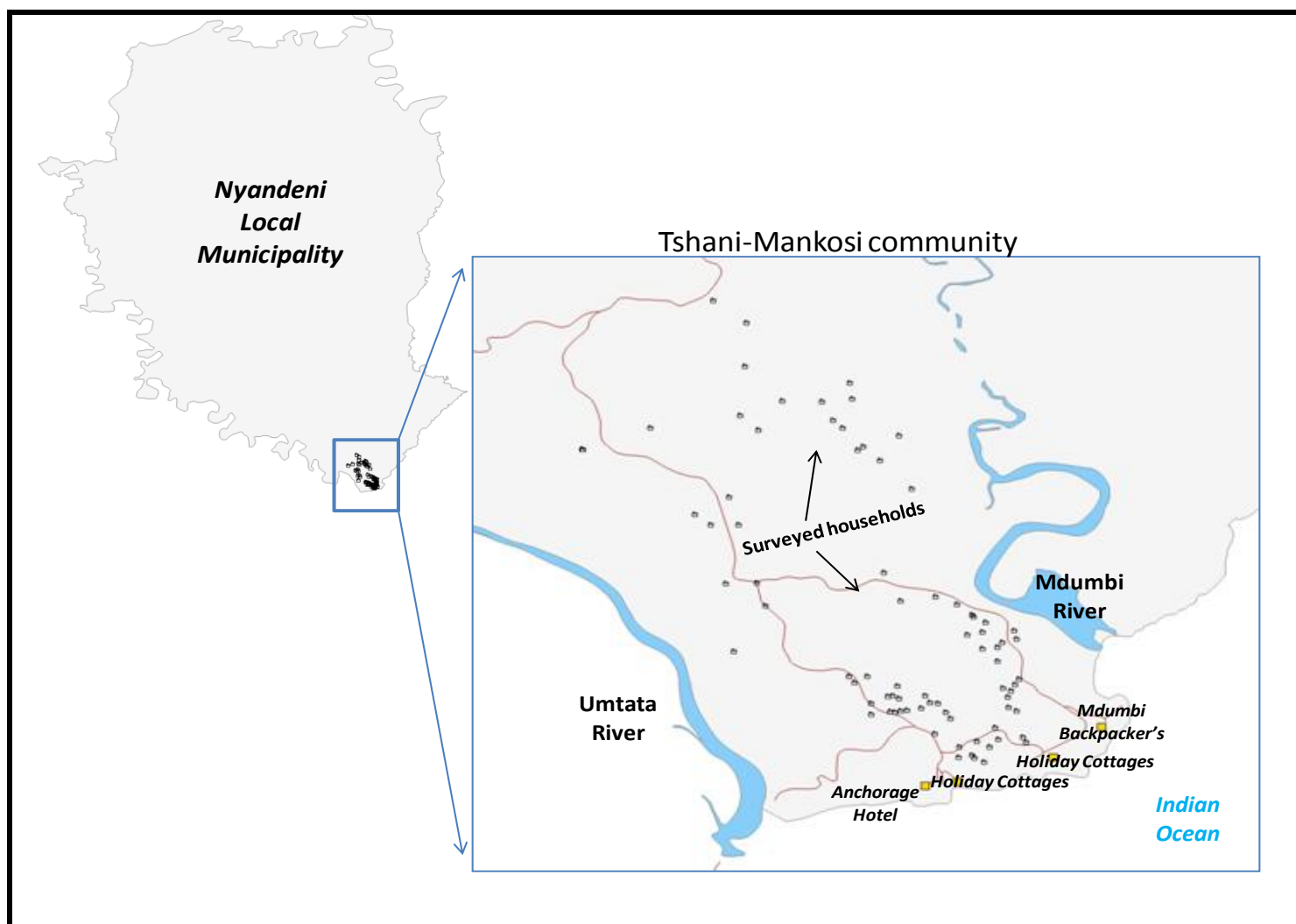


Figure 6.2: Map showing the location of the Mankosi community within the Nyandeni Local Municipality.

The Mankosi community, otherwise known as Tshani-Mankosi, is one of various communities under the administrative authority of the Khonjwayo TA. Mankosi consists of about 800 households in 12 villages, each headed by a Nduna (i.e. sub-headman) on behalf of the headman present in Mankosi (referred to in this context as the Nkosi, representing Chief Gwadiso who is the head of the Khonjwayo TA) (Table 6.2).

Table 6.1: Profile of the Mankosi community according to household survey data

Location	Nyandeni Local Municipality
Municipal ward	26
Number of villages in the Mankosi TA	12
Number of homesteads	±800
Household survey sample size	80 homesteads
Gender breakdown (%)	75% females 25% males
% female headed households	42%
Average no. of people per household	8, 6
Main material for dwelling construction	Walls – Mud brick/clay (91% of households) Roof – Thatch (90% of households)
Main household energy source	Firewood (i.e. for 91% of households)
Main drinking water source	Piped public stand post (89% of households)

Fisheries, tourism and conservation are the key coastal sectors that involve (to different extents) the people in the Mankosi community. Table 6.2 provides a breakdown of these sectors, the actors involved, their roles, and the coastal resources used.

Table 6.2: Actors, resources and their role in the use/management of coastal resources in Mankosi

	Actors	Resource use/management	Roles of actors
Fisheries sector	National level: Branch Fisheries - DAFF (formerly MCM)	Marine resources	Responsible for management of access to and sustainable use of marine resources
	Local level: Fishing committee and community monitors	Lobster, line fish, oyster, mussels and octopus	Monitor local use of fisheries resources and assist with verification of permit holders
	Small-scale fishers	Lobster, line fish, oyster, mussels and octopus	Users of fisheries resources for sale or subsistence
	Commercial buyer, i.e. Live Fish Tanks	Lobster	Buys crayfish from local fishers through DEA Social Responsibility Projects
Tourism sector	Nyandeni Local Tourism Board	The coastal zone	Management of tourism activities
	Mdumbi backpackers – TransCape NPO	The coastal zone	Market for local fishers through tourism; facilitate community development initiatives
	Anchorage Hotel, holiday cottages	The coastal zone	Potential market for local fishers through tourism
Conservation sector	Provincial Department of Environmental Affairs	The coastal zone	Responsible for the maintenance and conservation of the coast and resources occurring along the coast
	Coastal Working Committee		
	Coast Care implementing agent		

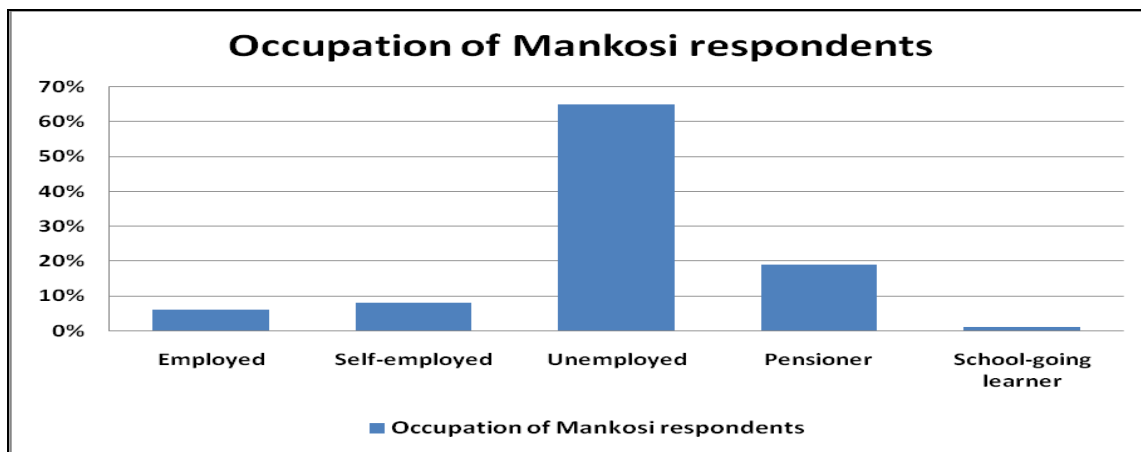


Figure 6.3: Occupation of respondents in Mankosi based on household survey results (n=80)

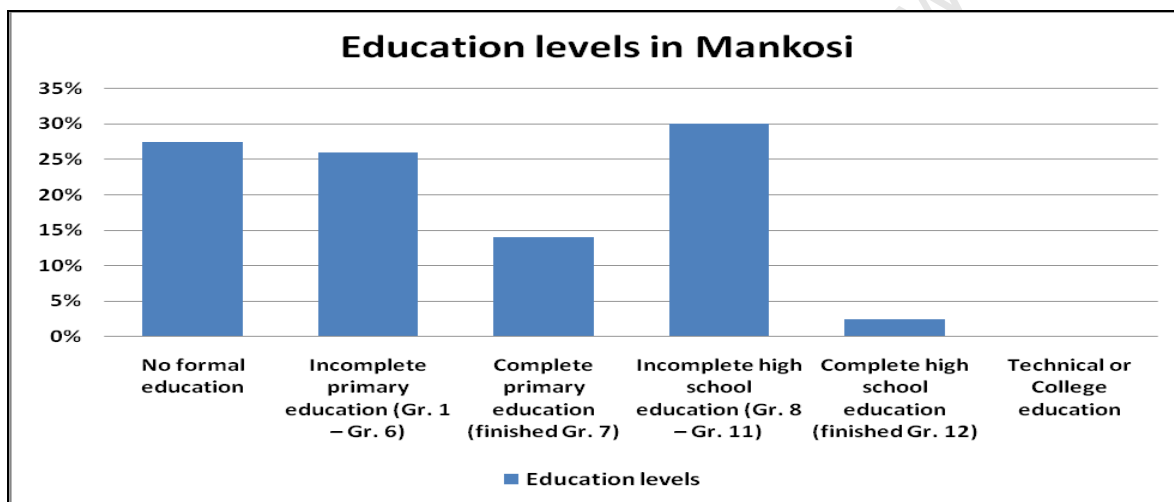


Figure 6.4: Education levels in Mankosi based on household survey data (n=80)

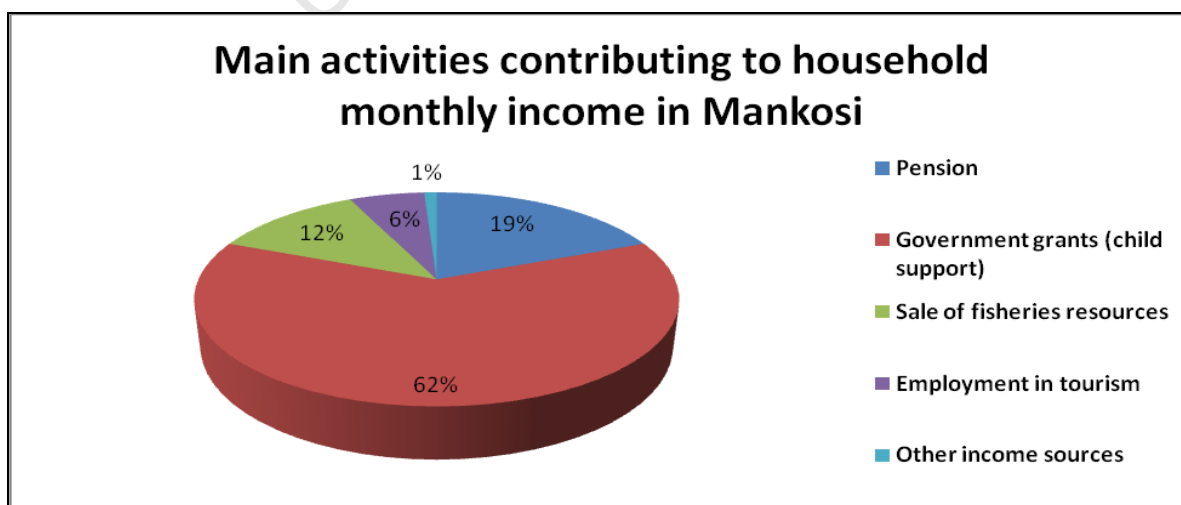


Figure 6.5: Key activities contributing to household monthly income in Mankosi based on household survey results (n=80)

In addition to the high unemployment rate in Mankosi, formal education levels were also low. Twenty eight percent of the surveyed population had no formal education, while only 3% had completed high school education (see Figure 6.4). Poor school infrastructure, overcrowding in schools, as well as the lack of accessibility to schools were the key education challenges faced not only by Mankosi, but also by the wider Nyandeni Municipality area, leading to low literacy levels (Nyandeni Local Municipality 2009/2010 IDP Review).

Living standards in Mankosi are poor, as revealed by the household survey results of this study. These results revealed that 90% of the community live in traditional dwellings made from mud brick, clay or sand, and roofs primarily made of thatch sourced from the grassland area found within the community boundaries. Basic service delivery within Mankosi is very poor, with erratic electricity supply, no tarred roads and a lack of sanitation facilities.

The Nyandeni Municipality statistics reveal that 36% of the population in the region has no access to regular monthly income, while 77% of households in the region have either no monthly income or income less than R800 per month (Nyandeni Local Municipality 2009/2010 IDP Review). The same trend applies for the Mankosi community, with 65% of the respondents in the surveyed households unemployed (see Figure 6.3).

Thirty four percent of households earned a monthly income less than R1,000, while most of the households earned between R1,001-R1,700 per month. These incomes were particularly low when one considers that the average household size in Mankosi was high, i.e. 8, 6 people per household. Figure 6.5 presents the key activities that contributed to monthly household incomes in Mankosi. The results indicate that, as within the wider Nyandeni region, government pension and child support grants were the highest contributors to monthly household incomes in Mankosi. Pensions contributed to 19% of monthly household incomes, while child support grants contributed 62% of monthly household incomes. The sale of fisheries resources (either to tourists, commercial lobster buyers or local people) contributed to the monthly incomes of 12% of Mankosi households, and the tourism sector (particularly by the Mdumbi backpackers) contributed 6% of household monthly incomes. These statistics confirm that the majority of Mankosi households did not partake in the formal economic sectors for income, possibly because the geographical location of Mankosi in relation to the areas with economic activities (i.e. Umtata, which is the nearest town but is approximately 200km away) is marginalized and secluded, making it difficult for people in Mankosi to travel

there to seek employment or other opportunities. Because the former Transkei is the least developed region in the Province, there are fewer businesses and limited local job opportunities, and therefore a lack of diversified income sources (Ashley and Ntshona, 2003). Results of this study confirm that government child support grants have become a significant income source for marginalized rural communities such as Mankosi, similar to results from Sokhulu and Mbonambi.

6.4 The fisheries sector in Mankosi

6.4.1 Fisheries actors and resources in Mankosi fisheries

People in Mankosi claim to have a long history of harvesting fisheries resources including: crayfish, line fish, oyster, mussels and octopus. Table 6.3 provides a profile of fishers in Mankosi based on the results of this study. Fisheries resources that were used in Mankosi were distributed along the Mdumbi beach and the rocky shore adjacent to the community, and there were different sites where the people in the community harvested different fisheries resources. Figure 6.6, drawn from mapping exercises conducted with different fisher groups in Mankosi, depicts the different parts of the Mankosi coast where the fishers indicated that they harvested fisheries resources.

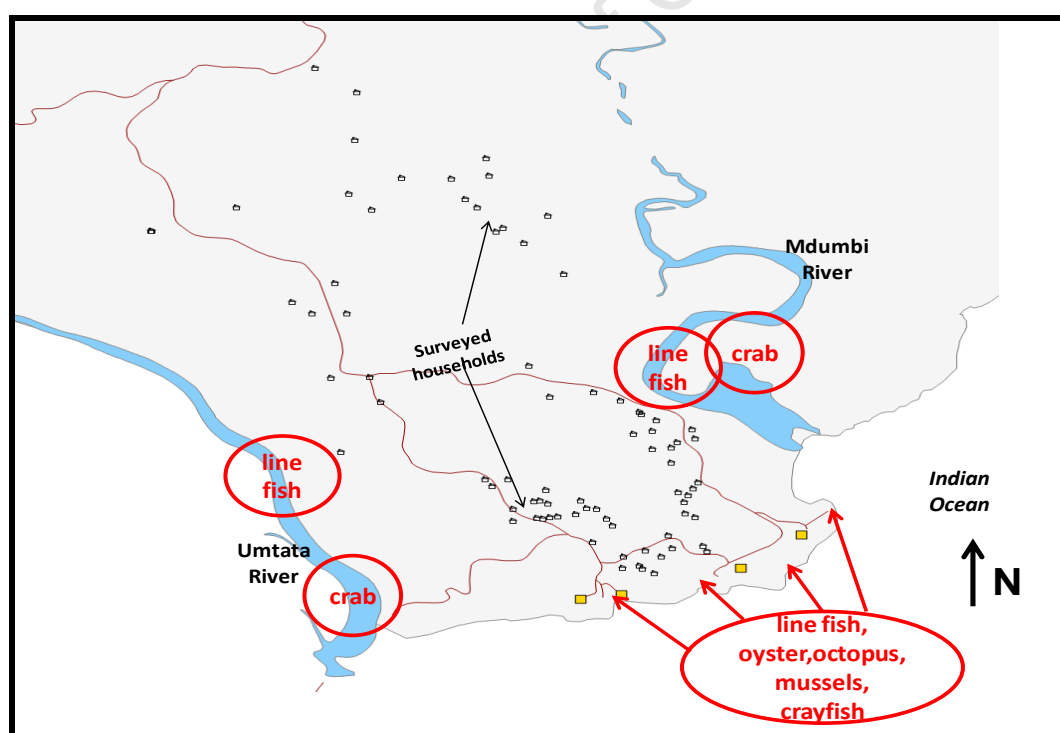


Figure 6.6: Different parts of the coastal zone where the Mankosi community harvests different fisheries resources.

About 74% of female fishers in Mankosi were unemployed and relied on child grants as household income sources. Although 50% of male fishers were unemployed, 67% of them

were household heads. The level of education of Mankosi fishers was also low. Most respondents had either an incomplete primary or incomplete high school education. Approximately 84% households who were involved in fishing earned monthly incomes less than R2,000.

Table 6.3: The socio-economic profile of male and female fishers at Mankosi based on household survey results (n=51)

Fishers		Males	Females
Gender		12	39
Age (standard deviation)		37.7 ± 18.7	39.4 ± 15.5
Occupation	Employed	1 (8%)	3 (8%)
	Self-employed	4 (33%)	0
	Unemployed	6 (50%)	29 (74%)
	Pensioner	1 (8%)	5 (13%)
Monthly household income	<R1000	4 (33%)	15 (39%)
	R1001-R1700	5 (42%)	19 (49%)
	R1701-R3000	3 (25%)	5 (13%)
	R3001-R7000	0	0
	R7500+	0	0
Education level	No formal education	1 (8%)	10 (26%)
	Incomplete primary school education	4 (33%)	13 (33%)
	Incomplete high school education	5 (42%)	11 (28%)
	Complete high school education	0	2 (5%)
	Tertiary/College education	0	0
Household heads		8 (67%)	13 (33%)

Sixty four percent of households in Mankosi harvested fisheries resources, and most of them had used the resources for more than twenty years. Forty five percent of the households who indicated that they harvest fisheries resources stated that they used the resources for food, while 59% of the households indicated that they sell the fisheries resources they harvest, either to the backpackers, the lobster buyer or to tourists. However, 22% of fishers indicated that fisheries resource stocks are decreasing because the number of people who rely on the

fishery has increased over the years. The results also revealed that that not all the surveyed fishers in Mankosi who harvested the resources possessed fishing permits. Table 6.4 illustrates the fisheries resources harvested at Mankosi and proportions of fishers who had legal permits. Of the 29% of resource users who indicated that they harvest crayfish, only 33% had permits. A similar pattern applied for all the other resources harvested.

Table 6.4: Fisheries resource users and those with permits to harvest the specific resources (n=51)

Fisheries resource	% of fishers who harvest the resource
crayfish	29% (33% of these possess permits)
line	57% (31% of these posses permits)
mussel	61% (13% of these possess permits)
oyster	45% (26% of these posses permits)
octopus	10% (none of these possessed permits)

6.4.2 Role of tourism in Mankosi fisheries

Tourism and the involvement of a locally based NGO in Mankosi have been responsible for enhancing benefits to local fishers and their livelihoods. Although the history of tourism in the former Transkei region dates far back before the 1950s, tourism in the region is still under-developed, constituting only 14% of all tourism in the country (Ashley and Ntshona, 2003). Along the former Transkei coast, tourism facilities include hotels, cottages and backpacker lodges (see Mankosi in Figure 6.2), and tourists are attracted to the area by its natural beauty, scenery, marine resources and its climate.

In Mankosi, the Mdumbi backpackers provides employment to local people and has been instrumental in promoting community benefits through tourism. The Mdumbi backpackers has played a role in enhancing benefits to Mankosi fishers through the market created by tourists that visit the area and stay in the backpackers. This is confirmed by the fact that 59% of Mankosi fishers who indicated that they sold their lobster catch stated that they sold their catch to tourists, the lobster buyers, and the Mdumbi backpackers, hence the backpackers is the immediate market for local fishers within the community (Raemaekers, 2009). Other holiday accommodation facilities in Mankosi, i.e. Anchorage Hotel and holiday cottages, employ some local people but do not engage in community development initiatives. TransCape has used profits from tourism and funds from international donors to support community projects by offering local people micro-finance loans, establishing an education

centre and pioneering an HIV/AIDS prevention project (TransCape, 2008). Mdumbi backpackers buys fisheries resources from local fishers and supports the Mankosi community by paying R500 per month to the community from its income from tourism (Mdumbi backpackers, 2011). In addition to this, Mdumbi backpackers has boosted local tourism by establishing village based accommodation for tourists on the hiking trail from Port St. Johns to Coffee Bay and assisting local entrepreneurs in developing small local businesses (MKI 4). Therefore, through boosting local tourism and providing livelihood support to people in Mankosi, Mdumbi backpackers and TransCape have played an important role in enhancing benefits to local people and to local fishers. Officials from the Eastern Cape Tourism Board and O.R. Tambo Municipality acknowledged this:

A positive example of benefit-sharing in Eastern Cape tourism is what Mdumbi backpackers is doing for the people in Mankosi - sharing the benefits from tourism with the local people through employing them and doing all sorts of things for the community (ECKI2).

A positive example of benefit-sharing in the District is that of Mdumbi backpackers in Tshani where local people get employment from tourism and the backpackers assists local fishermen with a market, helping the local people to benefit (ORKI).

6.4.3 Role of TA and Community Trust in Mankosi

There are three institutional structures in Mankosi that are responsible for administering all activities taking place at the community level: TA, the Ward Councilor and the Mankosi Community Trust. The Mankosi headman is the custodian of communal land in Mankosi and together with the 12 sub-headmen representing the TA in each of the villages, is responsible for administering communal affairs in Mankosi (MKI 1; MKI 3). The headman is accountable to the Chief of the Khonjwayo TA, which includes Mankosi and other communities in Ward 26. The headman works in parallel to the local government representative, the Councilor, as well as the Mankosi Community Trust. The Mankosi Community Trust was established in 2002 in connection with the establishment of the aquaculture project, and comprises elected community members. The role of the Trust has since been to administer all development proposals and initiatives presented to the community by external stakeholders (MCTFG). The

Mankosi Community Trust is accountable to the Department of Environmental Affairs (DEA) and the Department of Rural Development and Land Reform (DRDLR).

Although the Mankosi TA, the Mankosi Community Trust and the Councilor work in parallel to each other, they were not directly involved in activities related to the fisheries sector in Mankosi. However, the TA's and the Community Trust's roles in the distribution of benefits from tourism appeared to be conflicting. The TA was under the impression that as the custodian of the communal land, benefits from tourism (such as the community levy paid by local tourism facilities to the communities) should be administered by them (MKI 1). On the contrary, the DRDLR representative asserted that benefits aimed at developing the community were to be administered by the Community Trust and not the TA (ECKI3), since the Trust was established for this purpose. It appeared that the Mankosi TA felt that the establishment of the Trust reduced its powers, as they remarked that they were not adequately consulted by the Trust in issues pertaining to community development (MKI 1). As a result, the TA and the Community Trust in Mankosi do not have a good working relationship, as their roles in the community are not clearly defined, and the two structures do not consult adequately with each other in their activities, which creates confusion and conflict (MKI 1; MKI 3).

For instance, the chairperson of the Mankosi Community Trust asserted the following as an example of conflicting roles between the Trust and the TA in Mankosi,

...sometimes they (the TA) do not do things accordingly because there were once random developers who came to them and asked for permission to build a lodge at the Mdumbi beach and the headman said yes without even consulting with me or anyone.

When the headman of Mankosi was asked about the relationship between the TA and the Mankosi Community Trust, he remarked,

They (the Mankosi Community Trust) overlook me and never report to me – they do their own thing!

It is thus apparent that conflicts exist between the TA and the Trust in Mankosi. In addition to this, the TA, the Trust chairperson and the Councilor all asserted that they do not work well together, largely due to perceptions of political patronage. The association of the TA, the Trust and the Councilor with rival political parties caused the relationship between them to be

turbulent, and as a result affected the manner in which they worked as well as their perceptions of each other. For instance, the chairperson of the Mankosi Community Trust pointed out that the reason why the relationship between himself, the Councilor and the TA is characterized by conflict is because they are associated with different political parties (i.e. ANC and COPE¹⁶) which are competing for a dominant following at the local level. The dynamics that exist between these local institutional structures are important to take account of when seeking to understand the manner in which benefits are distributed.

6.4.4 Perceptions of benefits and losses from the fisheries sector in Mankosi

Apart from the different interventions and mechanisms that have played a role in enhancing benefit-sharing in the Mankosi fisheries sector (discussed later in this section), marine resources have been important assets to the livelihoods of the people of Mankosi, historically providing people with various benefits. Benefits perceived by fisheries resource users and others in Mankosi have included the following:

- a) Food obtained from harvesting the resources, enabling the fishers to provide a food source for themselves and their families (MFF1; MFFG2; MFF3);
- b) An increase in tourists attracted by the Mdumbi coast and the Mankosi fishery, providing a source of money for local fishers when they sell fisheries resources to tourists and tourism facilities within the community (MFF1; MFFG2; MFF3); and
- c) Traditional healers utilize marine resources for traditional medicines, and therefore obtain economic benefits to support their families (MTHFG 1).

No direct negative impacts from the fisheries or tourism sector were raised by either the fishers or the wider community in Mankosi. This implies that the economic benefits secured by fishers in Mankosi have mostly had a positive impact on their livelihoods. As discussed, there have been state and private sector interventions related to the fisheries sector in Mankosi that have been introduced to the community over the past decade. These have included the issuing of small-scale fishing permits to local fishers and the introduction of lobster buyers, which have impacted on the ability of local fishers to benefit from the resources. These interventions have acted as mechanisms that sought to enhance benefits from the fisheries sector in Mankosi and are explained in detail in the following sub-section.

¹⁶ COPE is an acronym for 'Congress of the People' – a new South African political party formed by breakaway members of the ruling party, ANC, before the 2009 national elections.

6.4.5 Mechanisms and tools for enhancing benefit-sharing in the Mankosi fisheries sector

Benefits to Mankosi fishers were not only channeled through the fisheries sector, but also through the tourism sector, involving the state (MCM), private sector (lobster buyer – Live Fish Tanks (Pty) Ltd. and an NGO (TransCape-Mdumbi backpackers) (see Table 6.5).

However, there is no co-management of fisheries resources in Mankosi, and no defined benefit-sharing mechanism or institutional arrangement put in place by fisheries managers.

The aquaculture project and the introduction of lobster buyers have also acted as mechanisms to enhance benefits to local fishers.

Table 6.5: Table showing state and private sector driven mechanisms for enhancing benefit-sharing in the fisheries sector through fisheries and tourism activities

	State mechanisms	Private sector mechanisms	NGO mechanisms
Fisheries	Mankosi fishing committee	Live Fish Tanks (Pty) Ltd. – exclusive licensed local lobster buyer	-
	Mankosi aquaculture project		
Tourism	-	-	Mdumbi backpackers tourist market

The national fisheries department, Branch Fisheries (formerly MCM), is directly responsible for managing small-scale fisheries in Mankosi and in the former Transkei coast, and there is no decentralization of management powers to the provincial or local levels, as is the case in KwaZulu-Natal small-scale fisheries (see Figure 6.7).

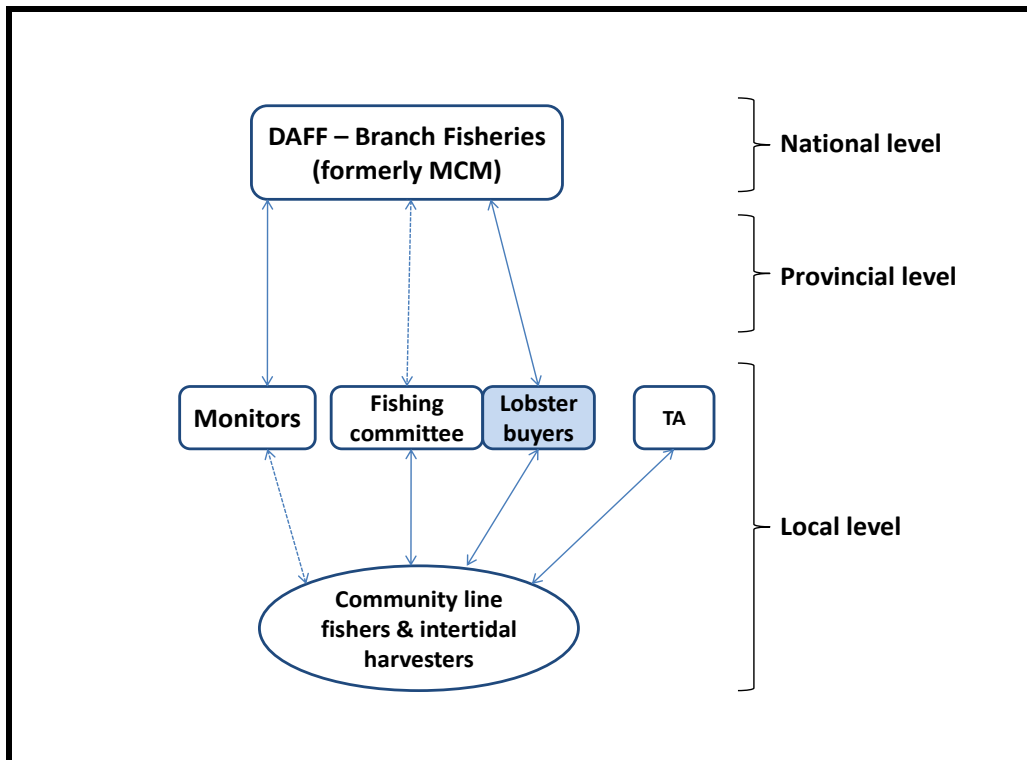


Figure 6.7: Institutional structure involved in Mankosi fisheries

The South African government recognized the need to include subsistence fishers in the formal fishing sector and after promulgation of the MLRA in 1998, the designated fisheries authority at the time, MCM, assigned a Subsistence Fisheries Task Group (SFTG) to produce guidelines to assist in the management of subsistence fisheries. Consequently, co-management came highly recommended by the SFTG as a mechanism that would enable the re-incorporation of subsistence fishers into the formal sector (Branch *et al.*, 2002; Sowman, 2006). In the Eastern Cape Province, a Subsistence Fisheries Management Unit (SFMU) was established by MCM which appointed environmental officers to assist the extension officers with distributing permits to identified fishers in the fishing communities, including Mankosi (Raemaekers, 2009). Marine and Coastal Management also appointed community monitors in Mankosi to monitor the activities of local fishers and report to MCM. These monitors were also used by MCM to help distribute fishing permits every year to local fishers. A fishing committee in Mankosi (comprising community fishers working with fishers in the community) was set up by MCM when extension officers were appointed to work in small-scale fisheries in the Transkei (Raemaekers, 2009). However, since co-management never materialized in the fisheries sector in this region, the role of the committee was unclear as they had no tangible role in decision-making processes (Raemaekers, 2009).

Commercial lobster buyers also operate at the local level in Mankosi, as some of them, such as the Phumalali Seafood Company which was the licensed lobster buyer for Mankosi in 2009, have a local base. The commercial lobster buying companies are industrial fishing companies that obtain rights from the national fisheries department to buy lobster exclusively from small-scale fishers (Raemaekers, 2009). The community fishers, together with the fishing committee, meet every year to vote in the buyer that they want to sell lobster to, based on the negotiations with the buyers that lobby to sell to the community. In 2010, Phumalali Seafood was voted out by community fishers and they Live Fish Tanks (Pty) Ltd. was voted in to be the new buyer. Commercial fishing companies are not the only market for fishers in Mankosi, as the Mdumbi backpackers also serves a market for local fishers, enhancing benefits from harvesting the resources.

6.4.6 Perceptions of benefits, losses and negative impacts arising from benefit-sharing mechanisms in Mankosi fisheries

Table 6.6 presents the benefits that Mankosi fishers perceived to obtain as a result of interventions that have been made in the fisheries sector in Mankosi. The smiley faces¹⁷ next to each benefit represent the ranking that the community gave to each benefit, depending on how much it impacted their lives (see Methodology in Chapter Two).

Table 6.6: Benefits perceived by Mankosi fishers and the ranking of the benefits

BENEFITS		BENEFIT RANKING
Legal rights of access – small-scale fishing permits issued by the national fisheries department		☺☺☺ (MFFG1)
Money	From selling to lobster or oysters commercial buyer	☺☺☺ (MFFG1) ☺☺☺☺☺☺ (MFFG2)
	From selling catch to backpackers	☺☺☺☺☺☺ (MFFG2) ☺☺☺☺☺ (MFFG3)
Food - from harvesting the resources used to feed fishers and their families		☺☺☺ (MFFG3)

¹⁷ The significance of benefits is ranked in ascending order from one to three, and three smiley faces represent the highest impact. Fishers were given a maximum ranking of three faces, however, where they were very happy about the benefits they obtained, they gave a ranking of more than three faces to express the positive impact of the benefit to their livelihoods (see Chapter 2).

All three fisheries groups, i.e. the fishing committee, male fishers and female fishers, indicated that the money they received from selling fisheries resources, either from the commercial buyer or the backpackers, was a significant benefit to them. While the female fisheries group highlighted that they perceived legal access rights from permits to be an important benefit to them, the male fishers group perceived that food obtained from harvesting the resources was the most important benefit (MFFG2; MFFG3). A Nyandeni Local Municipality official confirmed that permits enabled the community to sell the resources to tourists, and that the community was also the major beneficiary of the aquaculture project in Mankosi because they are able to sell lobster at market prices.

A former MCM monitor from the community asserted,

MCM policies have made great efforts to maximise benefits for local fishers who sell to cottage owners in this area because cottage owners usually rob local people and buy at a very low price. But now MCM has increased the price at which they buy and MCM also helps organise buyers for our local fishermen through the aquaculture project... Aquaculture is important for local people because now the money they will make from selling lobster will be much more than they make when they sell in the cottages and to tourists because they will now get R55 per 1kg of crayfish... (MKI 6).

There were, however, various factors that impeded the community's ability to obtain optimum benefits from harvesting resources, and these are discussed below.

6.4.7 Factors influencing benefit-sharing in Mankosi fisheries – losses and negative impacts

The results of this study indicate that national government controls the use and access of fisheries resources, as well as how benefits from resources are distributed in Mankosi. Thirty seven percent of fishers in Mankosi perceived the national fisheries authority (MCM) to be the most powerful decision-making stakeholder, determining the extent to which they could benefit from fisheries resources and the manner in which they could benefit. Figure 6.8 illustrates network diagrams conducted with fishers in Mankosi, depicting their perceptions of the role of national government in controlling access, benefits and ownership of fisheries resources in Mankosi.

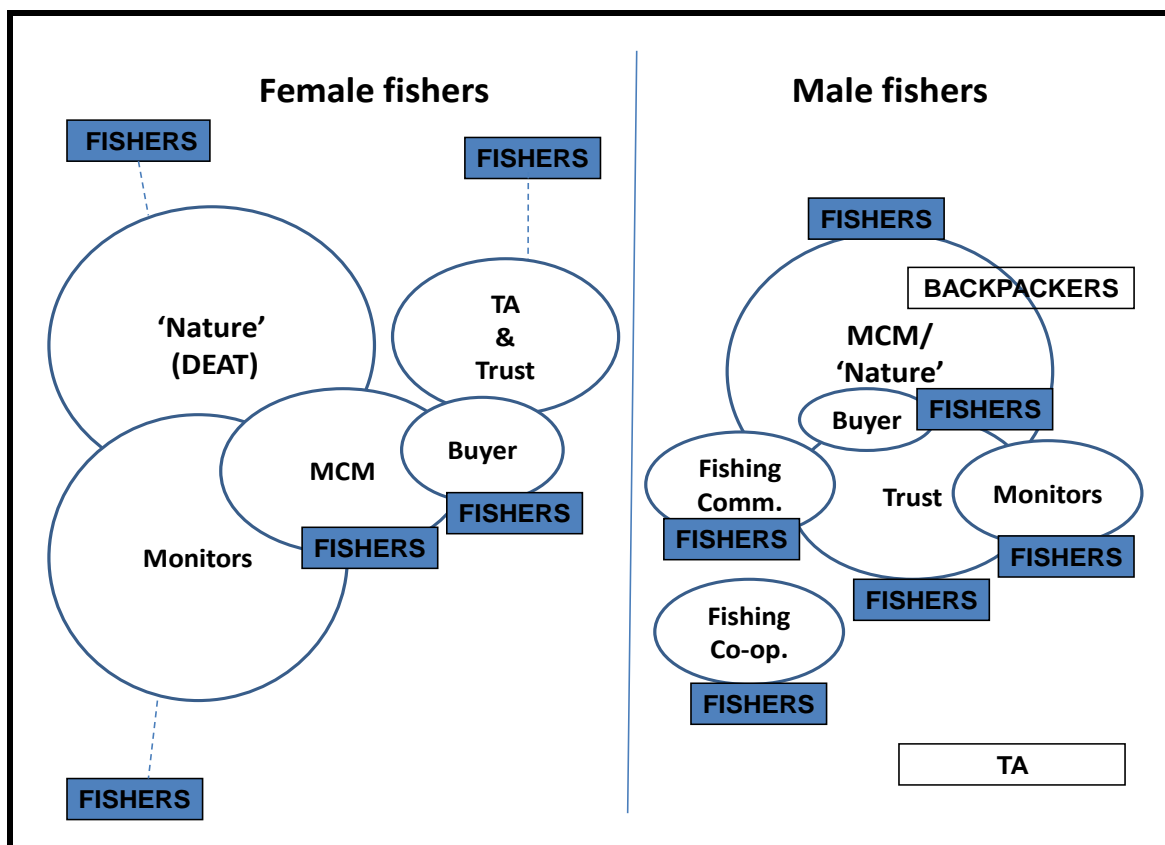


Figure 6.8: Network webs between fisheries stakeholders in Mankosi and the perceived decision-making power held by each stakeholder, as perceived by the female and male fishers in Mankosi.

Although fishers in Mankosi noted that they benefited from the recognition of their access rights to the fishery by MCM through the provision of permits, government fishing rules in the permits were largely perceived to hinder the ability of community fishers to benefit from the fishery. Although permits were meant to be a tool for redistributing fishing rights to fishers in Mankosi and other previously excluded small-scale fishing communities, 22% of Mankosi fishers in the surveys perceived that the permit regulations were not fair because they imposed restrictions on their livelihoods. Table 6.7 presents some of the losses by Mankosi fishers from the fisheries sector, perceived to be posed primarily by permit regulations.

Table 6.7: Losses perceived by Mankosi fishers and the ranking of the losses

Losses/negative impacts	Losses ranking
Permit regulations imposing restrictions on fishers	☹☹☹ (MFFG1) ☹☹☹ (MFFG2) ☹☹☹ (MFFG3)

In all three fisheries focus groups, there was consensus that permit regulations imposed negative impacts on fishers' livelihoods. Permits were perceived to infringe on fishers' historical ability to harvest as many resources as they wanted. The male fishers and the fishing committee also pointed out that because of permit regulations, they lost freedom to access the resources due to enhanced resource monitoring. A further negative impact incurred by Mankosi fishers due to permit regulations was that from 2001 onwards, MCM required local tourism accommodation facilities, i.e. Mdumbi backpackers and Anchorage Hotel, to obtain licenses in order to possess more than eight lobsters per day (Raemaekers, 2009). Raemaekers (2009) reveals that backpacker lodges and hotels along the former Transkei coast never received those licenses, and consequently, purchasing lobster from local fishers became illegal for these tourist facilities. Although other tourist facilities continued to buy from local fishers anyway, this rule by MCM imposed negative impacts on the livelihoods of fishers in Mankosi, particularly because it weakened their local market for lobster (Raemaekers, 2009). The Manager of one of the tourist facilities in Mankosi confirmed this,

The major loss to the community is that we can no longer benefit them by buying fisheries resources because the law prohibits us to do so and this is sad for the community because there is nothing we can do... MCM's law that prohibits us from buying fish from the locals is a blockage to benefit-sharing because it doesn't make sense why we have to buy fisheries resources from outside when we can source them locally and benefit local people. It's been years now that they don't want to give us a buyer's permit and this is troubling because it causes local people to lose out on a market we could potentially give them (MKI 4).

The Mankosi community and other communities along the Wild Coast also lost out because MCM reportedly took too long to issue permits to local fishers, and the whole process of annual permit issuing to these communities was deemed inefficient (Raemaekers, 2009; CBMP 1). This was problematic because once the lobster season opened fishers would get arrested by MCM officials if they were found fishing without permits, even though it was not their fault. A member of the Coffee Bay¹⁸ mussel project pointed out that MCM was inefficient in issuing permits in most places along the former Transkei coast, and sometimes would only issue the permits when the season was about to close:

¹⁸ Coffee Bay is also a fishing community south of Mankosi. An in-depth study of Coffee Bay fisheries was not undertaken for this study, however, several key informant interviews were conducted with key stakeholders in Coffee Bay fisheries for comparison with Mankosi and the other KwaZulu-Natal case studies.

One of the problems is that MCM comes here and prosecutes people for not having permits – MCM compliance confiscates people's catch and eats it and this is a problem for fishers because MCM is the one who takes too long to issue permits... I don't think MCM policies and laws facilitate any access, instead they inhibit it... There is some sort of political will to subject people to state welfare and this is a huge issue (CBMP).

These problems could explain why only 47% of all Mankosi fishers in the surveys indicated that they possessed permits. Raemaekers (2009) confirmed that 76% of the time, lobster fishers in Mankosi presented their catch for sale at the backpackers without possessing permits (Raemaekers, 2009). The reason for this was because most *bona fide* traditional fishers in Mankosi, Coffee Bay, and other fishing communities in the former Transkei were never issued with permits by MCM because of institutional discrepancies posed by the under-capacitated, inefficient, bureaucratic, top-down institutional arrangement put in place by MCM to distribute the permits.

In addition to these negative impacts, competition and politics between and among lobster buyers and community fishers have caused conflicts between competing buyers, and between the buyers and community fishers, and have also caused Mankosi fishers to incur negative impacts. One of the issues raised by community fishers is that once buyers are voted in, they sometimes take too long to pay local fishers or to collect catch from the community. Community fishers remarked that they lose out because of these (MFFG1; MFFG3). One of the key informants reinforced this sentiment:

Live Fish Tanks bribes local community members for exclusive contracts with the local divers, but ever since they signed with the local people, they have not come here even once to collect. I don't understand why they look for exclusive rights to buy from here when they don't utilize them– this needs to be investigated (CBMP).

A former lobster buyer in Mankosi pointed out that there are politics that exist between buyers, and some buyers take advantage of fishers in the community to meet their own ends. He asserted,

Lusitania won the contract to buy crayfish from the community this year. The only way Lusitania can beat me is by bribery... when I came through on the day that the Mankosi fishermen were voting for this buyer earlier this year, none of my fishermen were there because Life fish tanks paid my fishermen R500 each and beer, thus bribing them to vote for them and

against me. Lusitania bribed the head of the fishing committee even in another area along this coast and they gave him R600. I don't mind losing to them in a fair way but not by them stealing my fishermen and coming to community meetings with beer. MCM was also involved in this... (CLB).

It appears that fishers in Mankosi are unaware that they have become subject to such politics and competition between commercial buyers who are looking out for their own interests, and national government has not protected fishers in communities such as Mankosi. These findings reveal that the perception of unfair fishing regulations, as well as institutional inefficiencies, have impacted negatively on opportunities for benefits for local fishers.

6.5 Conclusion

The findings of this study show that coastal resources bring social and economic benefits to the people in Mankosi, through the involvement of local people in fisheries and tourism activities. The money that local fishers obtained from selling to the backpackers, the lobster buyer and tourists was regarded as the most important benefit by fisher groups in Mankosi. However, restrictions imposed by fisheries regulations were perceived to have had negative impacts on the livelihoods of fishers. In addition, the lack of willingness of government to put in place an institutional arrangement to involve local fishers in decision-making processes has negatively impacted on fishers' rights to access the resources, causing them to lose out on enhanced benefits from their markets. Competition between lobster buyers had negative impacts on local fishers, as some buyers appeared to take advantage of the community. The results confirm that a lack of robust mechanisms and institutional arrangements for enhancing benefits prevents opportunities for enhanced benefits to be realized.

CHAPTER SEVEN – DISCUSSION

7.1 Introduction

This chapter discusses the influence of institutional arrangements on access to and benefit-sharing from coastal resource use in Sokhulu, Mbonambi and Mankosi by examining factors underpinning benefit-sharing processes, as well as looking at why certain people or institutions benefit from resources at the expense of others and why benefits from resources and resource use are distributed as they are.

There are four key themes relating to institutions drawn from the results of this study that are discussed in this chapter. The first theme emerged from the fisheries sector results, and a comparison between KwaZulu-Natal and the Eastern Cape relates to the role of decentralization (or lack thereof) of decision-making power to local level institutions. The second theme analyzes the mining sector in Sokhulu and Mbonambi in order to highlight the significance of accountability of local institutional arrangements in benefit distribution. The implications of multiple institutions for equitable benefit-sharing are discussed as the third cross-cutting theme across all sectors in the three case study communities. These first three themes discuss elements that impact on the robustness institutional arrangements in benefit-sharing processes.

The fourth theme is about the role of state and non-state benefit-sharing institutions in rural coastal communities. This theme explores the pressure placed on benefit-sharing institutions in the respective sectors (i.e. RBM, TransCape and EKZN Wildlife) by local communities to play a developmental role at the local level, in the face of poor basic service delivery by government. Although the fourth theme does not directly relate to access and benefit-sharing of coastal resources, it is discussed here because it outlines broader institutional factors that have an indirect impact on the ability of people in rural coastal communities to benefit from coastal resources.

Although Ribot and Peluso's (2003) theory of access was pivotal in providing a theoretical framework for this study that was used to frame what is meant by 'access' and 'benefits', and how institutions influence these, the key themes that emerged out of this study are not fully encapsulated in this theory of access. Because this study used a grounded theory approach, the

key emerging themes discussed in this chapter were thus informed more by the findings of this study and broader related literature, rather than the theory of access alone.

7.2 Decentralization or deconcentration of power

Decentralization of decision-making power to the local level is one way to promote local participation in decision-making to enhance benefits to local people from resource use (Agrawal and Ribot, 1999). The findings of this study reveal that the management of small-scale fisheries in South Africa is characterized by two different forms of decentralization. These are democratic decentralization in KwaZulu-Natal and deconcentration or administrative decentralization in the Eastern Cape. Agrawal and Ribot (1999:475) define decentralization as “any act in which a central government formally cedes powers to actors and institutions at lower levels in a political-administrative and territorial hierarchy”. Where there is decentralization of decision-making power in benefit distribution, accountability and equity are important factors determining how benefits are distributed (Ribot, 2003). Democratic decentralization occurs where powers are devolved from the state to local actors or locally operating institutions that are downwardly accountable to local people, while deconcentration occurs where powers are transferred to upwardly accountable appointees of the state or committees (Manor, 1997; Agrawal and Ribot, 1999; Larson and Ribot, 2004). These characteristics, enshrined in the small-scale fisheries management regimes in KwaZulu-Natal and Eastern Cape, have shaped the way in which fishers have been impacted by the small-scale fisheries sector in both provinces.

Decentralization and co-management go hand in hand, as they have similar goals and attributes, which include the strengthening of local people’s participation in decision-making processes and enhancing the equitable distribution of power in resource management (Pomeroy and Berkes, 1997). The co-management arrangements in Sokhulu and Mbonambi which represent government authorities and fishers, and powers are devolved to the local co-management committees who represent local fishers in decision-making processes about the use and management of marine resources. The results of this study have revealed that decentralization of decision-making power in fisheries management can, in certain aspects, result in efficient fisheries management, while the lack of devolution of power to a local institutional arrangement results in inefficiencies in the fisheries management system, which is the case in Mankosi fisheries. Proponents of decentralization in the development literature argue that decentralization is essential in natural resources management, as it enhances

efficiency, greater local participation, and resource sustainability (Agrawal and Ribot, 1999; Larson and Ribot, 2004). The results of this study have shown that effective co-management of small-scale fisheries in KwaZulu-Natal has enhanced opportunities for fishers to benefit from the resources through local representation in decision-making processes, and has also enhanced resource sustainability and capacity. This has been through the efforts of EKZN Wildlife (Harris et al, 2003; SFFG1; SFFG2; MFFG1).

Decentralization in the management of resources can also promote greater equity because it gives marginalized communities the ability to have greater influence on rules through open decision-making processes, and facilitates a sense of ownership of decisions by bringing decision-making processes closer to the community level (Larson and Ribot, 2004). Line fish and mussel committees in Sokhulu and Mbonambi remarked that involvement in decision-making processes through co-management has been important to them because they have learnt a lot about how to use the resources more sustainably. In contrast to the past when conflict was experienced, co-management has reinforced a positive relationship between local fishers and the conservation authorities (SFFG1; SFFG2; MFFG1). The findings of this study showed that fishers in Sokhulu and Mbonambi expressed unhappiness about the fact that fishing regulations restricted the amount of resources that they could harvest. This has had negative implications on fishers' abilities to sustain their livelihoods. Although presence of EKZN Wildlife at the local level has meant increased fisheries law enforcement and close monitoring of resource stocks and use patterns, some fishers in Sokhulu and Mbonambi indicated that they were happy about obtaining fishing permits and about the access they have to the resources (EKZN Wildlife, 2010b).

In contrast, small-scale fisheries in Mankosi are managed by national government, without any proper co-management structure to include small-scale fishers in decision-making processes. Agrawal and Ribot (1999) assert that decentralizing powers to the local level should involve the establishment of a platform in which local communities can exercise some degree of autonomy in decision-making processes. This was not the case in the management of small-scale fisheries in Mankosi and the rest of the former Transkei coast. Although there have been efforts to implement co-management in the Eastern Cape, there have been insufficient human resources and capacity to implement it within the province (Sowman, 2006; Raemaekers, 2009). As an example, MCM appointed understaffed and under capacitated officials at the local level to identify small-scale fishing communities to be issued

with exemption permits, as a way of allocating administrative roles to the local level. This is defined as deconcentration of power to the local level, as these officials are upwardly accountable to the state and hold no real decision-making powers. As a result of this, there is poor decentralization of small-scale fisheries management in the Eastern Cape.

Although MCM established a fishing committee in Mankosi, this committee does not have any decision-making powers to manage resources. Agrawal and Ribot (1999) assert that for decentralization to be effective, powers that are devolved to the local level should include those to make decisions about the use of a certain resource; to mediate conflicts; to implement and ensure compliance and to create rules. The transfer of such powers to the local level is evident in co-management in KwaZulu-Natal. Here, committees are representative of all community fishers and have powers to decide on resource quotas of qualifying resource users (but not to decide on amounts allocated), to ensure resource users comply with resource use rules through community monitors, to decide on the harvesting system and harvesting zones, and to educate community fishers about sustainable resource use (Harris et al, 2003; EKZN Wildlife, 2010b).

This is not the case in the Eastern Cape as MCM exercises top-down management of small-scale fisheries resources and there is no platform to consult fishers in decision-making processes, hence the fishing committee in Mankosi and other fishing communities along the former Transkei coast do not possess any decision-making powers. Raemaekers' (2009) study, which focused on the abalone fishery in the Transkei, confirms that the locally elected committees that MCM established in the former Transkei were created to facilitate relations between the communities and commercial buyers, but lacked the additional skills, knowledge and capacity training that is possessed by the fisheries co-management committees in KwaZulu-Natal. Because MCM manages fisheries resources in Mankosi and the rest of the former Transkei coast from Cape Town offices, and by appointing extension officers at the local level who perform administrative duties, with no proper local institutional arrangements, various management gaps have resulted that have disadvantaged fishers.

For instance, MCM prohibits local fishers from selling their catch to tourists and tourist facilities, and they have hesitated to approve license applications of tourist facilities to buy catch from local fishers (Raemaekers, 2009). This is problematic because tourism provides a large market for fishers in the former Transkei. However, because MCM fails to acknowledge

or is not aware of this local reality, local fishers lose out. This was confirmed by several fisheries and tourism stakeholders in Mankosi and the former Transkei coast as they stated that MCM prohibits them from buying fisheries resources from local fishers and delays issuing them with permits when they have applied (MKI 4; CBMP; LTKI). However, some of the owners of tourism facilities that were interviewed admitted that they continue to purchase fisheries resources from local fishers, even if they do not possess permits because “it is unreasonable to tell people from the community who are hungry not to sell because they need the money” (LTKI).

There is also evidence that deconcentration has resulted in compromised resource sustainability and lost opportunities for enhanced benefits to local fishers. One of the fisheries key informants in the Transkei coast confirmed that the failure of MCM to devolve the management of small-scale fisheries to the local level by setting up an efficient local management structure has had implications for the sustainability of the resources, particularly lobster:

MCM law is flawed and is making inaccurate harvest records because fishermen are no longer allowed to fish or sell during weekends or public holidays because the monitors and MCM compliance are not working on those days. This has left a huge question mark in our catch data because whatever is now fished or sold on weekends is no longer recorded, causing whatever stock surveys that are done now to be flawed... (CLB).

Raemaekers (2009) also notes that due to the high demand for abalone harvesting, MCM's management structure of fisheries resources in the Eastern Cape is not sufficient to ensure the sustainable use of the resource.

These findings also have resonance elsewhere in the world. For example, there is substantial evidence revealing the reluctance of governments in many African countries to transfer discretionary powers for natural resource management to the local level (Pomeroy and Berkes, 1997; Agrawal and Ribot, 1999; Ribot, 2003; Poteete, 2004). A common observation is that governments tend to oppose local resource use and management, as they cling to conservation discourses which do not view local resource users as capable of managing resources (Ribot, 2003; Poteete, 2004). As a result, governments centralize the management of natural resources at the state level, and merely deconcentrate responsibilities to local level representatives or

institutions, as is seen for marine resources in the Eastern Cape. Ribot (2003) notes that this is a problem manifesting in many developing countries, with governments devolving insufficient powers to local structures managing natural resources, and failing to decentralize these powers. Some authors suggest that governments do not decentralize decision-making power for fear that their power would be threatened and resource sustainability would be compromised, especially in cases where local communities use resources not only for consumption, but also for economic benefits or profits (Pomeroy and Berkes, 1997; Poteete, 2004).

There is evidence, however, that collaboration between the state and communities in managing natural resources facilitates the ability of local people to benefit (Johnson, 2001). Murphree (1991) confirms that resource management and decentralization mutually reinforce each other, as communities have the ability to be effective institutions for resource management. Pomeroy and Berkes (1997) provide examples of effective fisheries co-management in Japan and Tanzania, which resulted from governments' dedication in both countries to decentralize fisheries management to the local level. Furthermore, the Communal Area Management Project for Indigenous Resources (CAMPFIRE) in Zimbabwe was instrumental in facilitating decentralization in the co-management of the Lake Kariba inshore fishery (Pomeroy and Berkes, 1997). In this case, fishing communities were empowered to benefit and to hold responsibilities for managing the resources and implementing decisions, as management control was relinquished from the state to the community level.

In Bangladesh, however, where there is poor decentralization in fisheries management, *bona fide* fishers have incurred losses due to increased privatization of benefits by middlemen-entrepreneurs who pose as *bona fide* fishers and purchase leases auctioned by government which are used to determine who can occupy fishing spots in the inland openwater fishery, (Pomeroy and Berkes, 1997). As a result, the middlemen sell leases to *bona fide* fishers, and end up benefiting more than them, while the *bona fide* fishers end up indebted to the middlemen. This shows that the lack of decentralization in fisheries management can result in losses to fishers due to gaps that result in management systems. This is consistent with Raemaekers (2009) findings which reveal that the failure of MCM to decentralize small-scale fisheries management in the former Transkei has resulted in the exclusion of many *bona fide* fishers who lose out on permits that are issued to people who pose as *bona fide* fishers, and benefit unduly. Sowman (2006) notes that this is a broader trend in South Africa. The national

government's failure to successfully recognize and provide access to traditional subsistence fishers amidst new entrant fishers with other sources of income in fishing communities has resulted in the exclusion of many poor fishers from accessing marine resources.

A study undertaken by Schell (2011), comparing small-scale fisheries co-management in communities in the KwaZulu-Natal, Eastern Cape and Western Cape provinces, also revealed that participation and involvement of local fishers in decision-making processes with EKZN Wildlife in KwaZulu-Natal resulted in effective co-management that led to the empowerment of fishers. This is contrary to top-down forms of small-scale fisheries management by MCM in the Eastern and Western Cape provinces, characterized by poor participation and consultation of resource users at the local level. For instance, due to a failure to decentralize power to the local level, MCM organizes permit allocation meetings in the former Transkei at short notice, and as a result, fishers who do not get notified in time about these meetings are not able to register and obtain permits (Raemaekers, 2009). Moreover, there is no platform for local fishers to have an input in setting the criteria for permit allocation in the former Transkei coast, as opposed to KwaZulu-Natal where local co-management committees are included by EKZN Wildlife in determining permit allocation criteria. Many non-fishers in the former Transkei coast who have other alternative income sources end up obtaining exemption permits instead of *bona fide* fishers with no alternative income sources, due to institutional gaps (Raemaekers, 2009). These examples indicate that sufficient decentralization is an important prerequisite of effective small-scale fisheries management. Hence, Berkes *et al* (2001) assert that devolution of fisheries management by the state and the allocation of decisions to local community level may be more effective than management efforts provided by fisheries managers that are distant, understaffed or under-funded by national government, which is evident in the Eastern and Western Cape.

However, the KwaZulu-Natal case studies also revealed obstacles to co-management of small-scale fisheries resources. These were primarily attributed to the lack of understanding of the socio-economic aspects of fishers' livelihoods by fisheries authorities, which caused fishers to perceive negative impacts to livelihoods from restrictions imposed by fishing regulations. Moreover, the results of this study showed that the livelihood needs of fishers change over time, and as a result, resource sustainability from co-management is decreasingly perceived as a benefit to fishers in KwaZulu-Natal, as they are increasingly seeking more

economic and social benefits from resource use that can overcome their livelihood constraints. Hence, Berkes *et al* (2001) point out that,

Co-management should be viewed not as a single strategy to solve all the problems of fisheries management, but rather as a process of resource management, maturing and adjusting to changing conditions over time, and involving aspects of democratization, social empowerment, power sharing, and decentralization (Berkes et al. 2001:203).

Although this is the case and although co-management may not always be appropriate, it is a more effective approach than centralized management approaches. Hence, a conclusion can thus be drawn that decentralization of power in small-scale fisheries management, as seen in fisheries co-management by EKZN Wildlife, yields better results than deconcentration of power by government. The findings have shown that co-management enhances equity in decision-making processes about fisheries resource use and access, and thus enhances the ability of fishers to benefit. In contrast, centralized and deconcentrated small-scale fisheries management has proved to be a failure in many countries around the world (Pomeroy and Berkes, 2009). Ostrom (2005) confirms that the participation of local people in decision-making about resource use is crucial because local environments change consistently over time, and officials making decisions far away from the local level do not know of these changes. Hence the failure of government to establish robust institutional arrangements for managing resource use and access at the local level has caused inefficiencies in the management of fisheries resources in the Eastern Cape. This has not only negatively impacted small-scale fishers in this province by compromising their access to the resources and impinging on their ability to benefit economically, but it has also compromised resource sustainability.

7.3 Accountability in institutional arrangements

The accountability of institutions, both at central and local levels, is crucial for efficient decentralization and the establishment of robust local institutional arrangements (Manor, 1997; Agrawal and Ribot, 1999; Larson and Ribot, 2004; Ostrom, 2005). Johnson (2001) points out that democratic decentralization in rural areas is essential in achieving enhanced accountability and empowerment of poor people. The results of this study, however, show that mining institutional arrangements in Sokhulu and Mbonambi had questionable downward accountability to local people, which negatively impacted on people's ability to benefit.

Ribot (2003) points out that the transfer of benefit distribution powers within or into local institutions may promote or undermine representative, accountable and equitable processes, depending on the local actors being entrusted with the powers to distribute benefits. Ordinary community members in Sokhulu and Mbonambi had concerns that RBM's local institutional structures represented their own private interests and not those of the communities, and that these committees and the TAs absorbed benefits from RBM meant for the wider communities, due to a lack of accountability and use of political patronage.

Power is a significant factor impacting on the ability of people to benefit from natural resources and is manifested in the ability of certain stakeholders to influence how others benefit from a resource (Ribot and Peluso, 2003). The degree to which the decision makers involve people in deciding how benefits are shared determines the power relations between institutions and resource users (McDermott, 2009). For example, in this study the TAs, CSR and BBEEE committees or Trusts in Sokhulu and Mbonambi were given power by RBM to distribute benefits from mining to the wider communities in Sokhulu and Mbonambi. People in Sokhulu and Mbonambi remarked that the TAs and mining committees have power over benefit distribution and misused it as they did not consult widely with the communities on benefit distribution matters that they discussed with RBM. As a result, the opportunities for local people to benefit from mining were compromised.

A comparison between the appointment of those representing the communities in the fisheries co-management committees and in the mining institutional arrangements (including the TAs) in Sokhulu and Mbonambi may provide a possible explanation for the accountability concerns associated with the distribution of mining benefits. Agrawal and Ribot (1999) and Poteete (2004) assert that democratic decentralization that does not involve democratic processes (such as elections) in establishing institutional arrangements to represent local people in decision-making processes promotes the unaccountability of local representative structures. The example of fisheries co-management in Sokhulu and Mbonambi shows how the democratic election of community representatives in the co-management committees enhances downward accountability. In Sokhulu and Mbonambi, members of the fisheries co-management committees are and always have been elected by community fishers themselves (Harris *et al*, 2003). Fishers in Sokhulu and Mbonambi pointed out that the co-management committees are accountable to them and take their views into account when making decisions (SFFG3; SFFG4; MFFG2).

However, people in Sokhulu and Mbonambi did not feel the same about the local institutional structures for distributing mining benefits. In Sokhulu, the Youth Development Committee comprises community members that are employed by RBM to recruit community members on their behalf, and also community members that are affiliated to the TA. The BBEEE Trusts in Sokhulu, i.e. Community Development Trust and the Shareholding Trust, were formed to represent the community in the BBEEE consortium by RBM, and they comprise members of the Sokhulu Tribal Council and the Sokhulu Ward Councillor. Similarly, in Mbonambi, the Job Seekers Committee comprises community members employed by RBM or its contractors, while the BBEEE Trusts that are similar to those in Sokhulu, comprise members of the Tribal Council. None of these institutional structures were voted for by the wider communities and the community members in them have a stake in RBM mining, either through employment, or through affiliation with the TAs. The selection of the TAs themselves is also not by popular vote but is based on heredity and is for life (Beall *et al*, 2004).

Based on these comparisons, one can argue that RBM's local institutional structure for benefit-sharing lacks accountability because these structures were not elected by the wider communities, in contrast to the case of fisheries co-management representatives that were voted for by local people. Larson and Ribot (2004:11) remark that "leaders who cannot be selected – or removed – by constituents have only limited downward accountability". Agrawal and Ribot (2003) confirm this assertion by providing an example from the Senegalese forestry sector where rural councils which receive powers to distribute benefits to local people from government are selected by government and not elected by community members. As a result, villagers often feel that the rural councils do not represent community needs. Moreover, councils are not accountable to the local people since there are no formal mechanisms put in place by government to allow for this. This shows that the lack of democratic decentralization negatively impacts on the accountability of local institutional structures for benefit distribution. This affirms Ribot's (2003) finding that problems often arise with local institutional arrangements (such as the ones put in place by RBM in Sokhulu and Mbonambi) that merely exist to administer activities and decisions already prescribed by institutions without community involvement, as they neither represent nor are accountable to local people.

These problems are exacerbated in situations where relationships between external actors and local communities are not strong. In Mbonambi, the turbulent relationship between RBM and the community needed to be resolved to enhance the ability of local people to benefit from RBM mining. Veiga *et al* (2001) concurs that in communities that do not have a strong relationship with a mining company, and where benefits from mining have not been collaboratively determined or equitably shared, there is often a general perception that mining operations are intruding into the community's environment, culture and their livelihoods. This may explain the mismatch between RBM's efforts to involve and benefit the community, and the lack of satisfaction of the community about the benefits they obtain and their involvement in decision-making processes (MMGF1; MMFG2). These institutional gaps in mining benefit distribution affirm that the control of benefits from resource use by upwardly accountable institutional structures (such as the mining committees and the TAs) that are appointed or put in power through means other than democratic election compromises equity and accountability (Manor, 1997; Agrawal and Ribot, 1999; Poteete, 2004).

Another key issue emerging from the results concerned accountability in the distribution of mining benefits, and the perception that this was compromised by RBM's failure to follow up on the TA and related committees to ensure that community members are consulted on issues relating to benefit-sharing. Larson and Ribot (2004) point out that for convenience, institutions often decentralize power to unaccountable local structures and fail to monitor their activities, which effectively compromises the ability of wider communities to benefit. Tolsi (2011) confirms that many members of the communities in Sokhulu and Mbonambi feel excluded from developments and Black Economic Empowerments deals by RBM and other large companies in these communities, and that people in these communities felt that they were being used as a labor pool by these companies on land that was traditionally theirs. Moreover, it appears that the local structures for benefit-sharing that RBM put in place in Sokhulu and Mbonambi are a convenient way for the company to comply with the law and to improve its reputation and its profit margins, in order to be considered socially responsible (Jenkins and Obara, 2008).

People in Sokhulu were aware that RBM sought to distribute benefits from mining to the wider community, but that there were factors that blocked these benefits from filtering to the ground. Members of the wider community believed that the local authorities in Sokhulu misused the powers RBM gave them to control benefit flows and beneficiaries. In so doing,

an equitable flow of benefits to the wider community was blocked. This was affirmed by the household survey results which revealed that 44% of Sokhulu households who were aware of the Sokhulu Youth Development Committee believed that it did not fairly represent the community and its needs in the mining sector. The lack of accountability of RBM's local institutional structures was exacerbated by the fact that RBM did not follow up on whether its community institutions were consulting widely and whether they were truly representative of the needs of the community. Ironically, this is well noted by the national minerals authority which has asserted that the misuse of power by local individuals or institutions who pose as representatives of the interests of host communities within benefit-sharing structures in the mining industry, negatively impacts on the ability of the communities to benefit from mining (DMR, 2009).

7.4 Multiplicity of institutions and benefit-sharing

One of the issues that affected equitable benefit-sharing was related to the existence of multiple local level institutions involved in decision-making about benefit distribution. The existence of TAs alongside democratically elected representatives proved to be problematic in benefit distribution processes across all case study sites. This is primarily attributed to the fact that in the democratic dispensation, TAs still have the same amount of powers they were given by the apartheid government, and they still have dominant control in rural areas (Ntsebeza, 2002). The results of this study show how the failure of government to clarify TA roles in rural communities in KwaZulu-Natal and the Eastern Cape, has led to TAs misusing their powers to control benefits meant for the wider community.

The interference of TAs in different sectors that provide benefits to rural communities undermines democratic benefit distribution. As this research affirms, the prevalence of TAs is one of the main blockages to democratic decentralization in rural South Africa, since they undermine democratic processes in rural areas in the local government dispensation (Ntsebeza, 2002). As discussed in the previous section, the co-management partnership between EKZN Wildlife and fishers in Sokhulu and Mbonambi has provided a prime example of how the establishment of a robust institutional arrangement in decentralized resource management and benefit distribution reduces conflicts and enhances accountability of local institutional arrangements. In fact, one can argue that the efficiency of the local fisheries co-management structures in Sokhulu and Mbonambi could have also been enhanced by the lack of participation of TAs in the fishing committees. The apparent trend that was identified from

the results of this study across all three cases studies was that TAs participated in local institutional arrangements for distributing benefits, particularly where the benefits involved held high economic value.

Fisheries resources in Sokhulu and Mbonambi communities hold no substantial economic value to local people as they cannot be sold to outsiders, while in Mankosi, the economic value from fisheries resources to local fishers does not represent large sums of money. However, RBM provides dividends to Sokhulu and Mbonambi through their involvement in the RBM BBEEE consortium, while tourism provides economic returns in Sokhulu and Mankosi through the community levies paid by EKZN Wildlife in Sokhulu and the Mdumbi backpackers in Mankosi. For instance, RBM paid R17,5 million endowments to Sokhulu and Mbonambi as part of the RBM BBEEE deal in 2010 (RBM1). EKZN Wildlife also intends to pay R500,000 to the Sokhulu community as a community levy from tourism (EKZNW5). Mdumbi backpackers has collected a community levy of R25,000 to pay to the Mankosi community. Interestingly, the mining and tourism sectors in these communities are the ones where equity issues in benefit distribution were identified, primarily due to the fact that the economic benefits in these sectors were highly contested between the TAs and local committees. In contrast, there were no reports of equity issues or conflicts in the distribution of benefits in the fisheries sector within these communities, as the TAs did not interfere with the duties of fishing committees.

In the mining sector, there were also a myriad of institutional arrangements for benefit-sharing, often leading to confusion within the community and a lack of coherence. Lund (2006) explains that institutional plurality is prevalent in most African countries as there are often multiple layers of institutional arrangements operating alongside traditional institutions at the local level. For instance, the Youth Development Committee, TA, Community Development Trust and Shareholding Trust are all community institutions in Sokhulu with whom RBM works. Each of these institutional structures, except the TAs, has a different mandate so structures work separately from each other. For instance, the Youth Development Committee and the Community Development Trust have community upliftment roles but use separate benefit-sharing strategies, i.e. CSR and BBEE, and thus they do not work together. This confuses community members as to who is actually responsible for distributing benefits and it leads to the absorption of benefits meant for the wider community by those responsible for distributing them, as reported by community members in Sokhulu and Mbonambi. Thus

Lund (2006:700) asserts that the “plurality of institutions may open alternative avenues for some – also for poorer people – but the more affluent, the better connected, and the more knowledgeable tend to have the upper hand in such contexts”.

Political patronage was widely used by TAs in Sokhulu and Mbonambi to determine benefit distribution from RBM mining. Community members in Sokhulu asserted that when RBM puts out tenders for the Sokhulu community, successful candidates were usually people in the community who were known to be members of the Inkatha Freedom Party (IFP)¹⁹ or who came from the villages where the traditional leader and the Councilor reside. There was a belief that the TA was currying political favor with the R17.5 million BBBEE endowment paid by RBM to the community, saying that if local people did not join a particular party, they would not get access to the benefits. Beall *et al* (2004) confirm that one of the key problems in rural areas of South Africa is that TAs operate on principles that are not downwardly accountable and are antithetical to the ideals of democracy by using political, hierarchical and patriarchal systems to exclude others from obtaining benefits. Hence, it was reported that local people in Sokhulu had begun to ‘join’ the political party affiliated to the TA in desperation and in fear that they would not access the benefits from the BBEEE money (SMFG2). This was underpinned by the fact that the Councilor had told community members that the Tribal Council had decided to use some of the money to give bursaries to local youth to study in tertiary institutions. There were reports that some local youth in Sokhulu were excluded from obtaining the bursaries because the villages that they came from were earmarked by local authorities as opposed to the locally dominating political party (SMFG2).

Although a local authority representative in Sokhulu denied these claims and asserted that they have never discriminated on a political basis for benefit distribution (SKI 1), it is clear that allocating powers to non-representative authorities constituted by private interests can promote lack of accountability and affect fairness in decision-making about the distribution of benefits. Furthermore, lack of accountability can slow down democratic processes at the local level, making other institutions involved (i.e. RBM) lose legitimacy in the eyes of the communities (Ribot, 1999; 2003). A RBM official noted that communities no longer trust

¹⁹ The IFP is a political party with a major support base from chiefs and headmen in KwaZulu-Natal (Beall *et al*, 2004). The Sokhulu Tribal Council, including the Councilor, were allegedly affiliated with the IFP, and therefore, the villages (including the people in them) where the traditional leader and the Councilor reside were perceived by the people to be ‘IFP villages’. Certain villages in the community were known to be opposed to the IFP, and were perceived as ‘ANC villages’.

RBM and their leaders because “the royal family mostly wants special attention...they feel development should be for them and they feel that they are running the community and the people are just there...people have been cheated so much that they don’t believe there is good that can still happen” (RBM 1).

Issues of political patronage and misuse of power were not unique to the mining sector, but occurred also in the tourism sector in Sokhulu, the forestry sector in Sokhulu and Mbonambi, as well as between the local representative structures in Mankosi (i.e. the TA and Mankosi Community Trust). In Sokhulu, the Maphelane Nature Reserve pays a community levy from tourism to the communities adjacent to it, including Sokhulu. According to an EKZN Wildlife official, they have been paying this levy for about five years and approached the TA to consult with the community members to decide together about a community project to support (EKZNW5). However, in the surveys and interviews held with community members, it was evident that the community members had no knowledge of this money and had been poorly informed about it. There were suspicions among community members and some EKZN Wildlife officials that the TA wanted this money to come to them as cash and not in the form of a project so that they would use it for themselves; hence they had not informed the community about it. An EKZN Wildlife confirmed that “there is lots of political unrest among the Sokhulu TA and the TA is full of old people who think money is just for the TA and not for the entire Sokhulu community” (EKZNW5). This EKZN Wildlife official also noted that they have approached the TA on many occasions trying to help upgrade the schools with computers, as one school had requested, but their request was not successful with the TA. Another family in the community wanted to develop a community nursery and wanted to access the community levy fund money to do this, but their application was turned down by the TA (EKZNW5).

A government official remarked that in the forestry sector, political patronage is used by the committees put in place to represent the community in a way that affects decision-making and benefit distribution patterns. He asserted,

...IFP is dominating at Sokhulu while ANC dominates at Mbonambi – and these political divisions have a major role in plantation forestry in these areas. For example, three years ago we had a meeting with the Sokhulu committee for plantation forests by DWAF and because of political divisions, we had to have the same meeting twice, i.e. meet with the ANC group and the IFP group separately – these people are in the same committee

at Sokhulu but because of politics they wouldn't speak to each other"(DWAF1).

In Mankosi, conflicts between the TA and the Community Trust have blocked the distribution of benefits from tourism. A DRDLR official explained,

... benefits are not yet reaching everyone in the community because the local institutional structures for benefit-sharing are flawed. For instance, in Mankosi, there is a power struggle between the Community Trust (whose members were democratically elected) and the headman over money for development and this delays any other development processes underway for the community's benefit because whoever has to deposit money on the community's account gets confused as to whom to give it to (DRDLR1).

The Mankosi headman was convinced that as the community leader, he should be the one who determines how the benefits from this money should be distributed to the wider community and not the Community Trust. Furthermore, there were suspicions that issues of political patronage between the TA and the Community Trust members in Mankosi exacerbated the conflicts and competition between them about benefit distribution, as the two structures are affiliated with rival political parties. A DRDLR official pointed out that the TAs role is to govern the people but it is the role of the Community Trust to facilitate the distribution of economic benefits that are meant to develop the community (DRDLR1). As a result of these institutional ambiguities, the money that the owners of the Mdumbi backpackers want to pay to the community is accumulating in their account because they are confused about who to pay it to, and the community is still not benefiting from it because the TA do not want to accept that the Community Trust holds the power to distribute the benefits from this money to the community. The findings confirm an analysis by Ntsebeza (2002) and Logan (2008) who point out that the institution of TAs is opposed to most notions of democracy and decentralization in rural areas, as these threaten the jurisdiction of TAs. This research also reveals that TAs are opposed to other forms of alternative local institutional arrangements as they would potentially compete with them, preferring power to be concentrated in their hands, as during the apartheid era. A DRDLR representative affirmed that in order to enhance equity in benefit-sharing, there is a need for TAs to relinquish power to other downwardly accountable local structures in rural communities. Hence he stated, "TAs cannot be a player and a referee at the same time, because if that happens, they will not be accountable for anything" (DRDLR1).

It is therefore apparent that institutional plurality minimizes accountability and exacerbates the power struggles and misuse by community leaders, which prevents the distribution of benefits to the wider communities. Moreover, the lack of clarity about the roles and powers of TAs at the local level has proved to be a significant blockage to benefit-sharing, as TAs undermine the ability of rural communities to have a say in decision-making about benefit distribution. A local government official in KwaZulu-Natal also confirmed this by pointing out that, “Dual governance is a big problem in South Africa, especially in KZN - there are always conflicts between ward committees and the tribal authorities and that is a national problem. This causes dual administration, as the roles of Councillors conflict with that of tribal authorities – one can’t determine who is more powerful between the two” (MLM). Veiga *et al* (2001) note that the participation of all community members in decision-making about benefit distribution is imperative in establishing equity in benefit distribution. Ribot (2003:61) summarizes this sentiment, asserting that “establishing accountable representative institutions is a priority – perhaps a precondition” for equitable benefit-sharing and “without systematic means for public participation and voice in local decisions, transfer of power to the local arena becomes deconcentration or privatization by default”, which concentrates powers to unaccountable institutions at the expense of the communities.

7.5 Limited statehood and benefit-sharing institutions in rural coastal communities

One of the trends that were identified from the findings of this study was the poor investment and developmental support provided by government in rural areas of KwaZulu-Natal and Eastern Cape. Government also has poor authority and visibility at the local level in these rural communities, overshadowed to some extent by TAs. The marginalization of rural communities, characterized by poor development and employment opportunities, presents limited income or livelihood support options for people, and thus enhances their reliance on natural resource use (Glavovic and Boonzaier, 2007). Due to a lack of alternative economic and social livelihood opportunities in rural communities, there has been increased pressure on conservation institutions to play a developmental role at the community level. Similarly, the private sector and NGOs have increasingly provided basic services that are the traditional preserve of government. Risse (2006; 2010) refers to the lack of a political will by governments in ‘newly’ industrialized countries like South Africa to provide services to certain local or policy areas in a country as limited statehood. The rural coastal communities in this study can be understood as areas of limited statehood, as non-state actors (i.e. TransCape NGO), private companies (i.e. RBM) and conservation authorities (i.e. EKZN

Wildlife) either assume or are expected by local people to assume the role of the state to provide economic and social services at the local level.

In Sokhulu and Mbonambi, RBM's CSR programs are contributing to infrastructure development, such as roads, health facilities and schools, yet these are functions that should be provided by local government. Because of a lack of delivery by the state, community members in Sokhulu and Mbonambi now see it as RBM's responsibility to bring development to these communities. In Mankosi, poor basic service and social welfare delivery by government to local people has resulted in TransCape playing a large role to fulfill these functions at the local level. TransCape assists with education, healthcare, employment, microfinance and other livelihood support functions to local people. However, a TransCape representative remarked that they receive minimal support from local government and that there is little interest by local government in assisting them with the welfare of local people (MKI3). These examples of RBM and TransCape taking over some responsibilities of the state are defined by Manor (1997:3) as 'decentralization by default', which occurs when government institutions fail to fulfill their duties at the local level, so much so that NGOs and the private sector step in to play a developmental role out of necessity (Risse, 2010). This has compromised the potential of communities to fully benefit from the economic opportunities provided by RBM and TransCape because if the basic services were delivered by government, these institutions would focus on providing other kinds of benefits to the local people.

Poor alternative livelihood support provision in Sokhulu and Mbonambi, attributed to limited statehood has also caused many fishers in these communities to place expectations on EKZN Wildlife to play a developmental role at the local level. Although fisheries co-management in these communities had been useful in enhancing benefit-sharing and resource sustainability, there was a concern by fishers that EKZN Wildlife placed more emphasis on enhancing resource sustainability than on the socio-economic dimensions of fishers' livelihoods. Fishers believed that because fisheries co-management has meant enhanced resource use restrictions, the fisheries conservation authorities should assist fishers with alternative livelihood options, in order to reduce fishers' reliance on the resources. Scholte (2003) confirms that worldwide, there is increasing pressure from local communities on conservation authorities to play a developmental role to assist their livelihoods. Fishers in Sokhulu and Mbonambi were under the impression that 'co-management' with EKZN Wildlife not only meant partnering in enhancing resource sustainability, but also in enhancing social and economic aspects of

fishers' livelihoods. To some extent, this occurred when mussel co-management started in Sokhulu in 1995, as an EKZN Wildlife official assisted female mussel harvesters by teaching them alternative livelihood skills, such as crafting, so that they could get an income source that would supplement their livelihoods (SFFG 2; SFFG 3). However, when this official was no longer in charge of co-management in Sokhulu, the alternative livelihood projects stopped, and the mussel harvesters claimed that since then they have suffered. Although fishers noted that they benefited from obtaining legal rights to harvest resources when co-management started, they no longer see legal rights as a benefit. It is apparent that economic benefits and alternative livelihood support options are highly sought after by fishers in Sokhulu and Mbonambi. For instance, fishers in Sokhulu and Mbonambi stated that prohibitions to sell fisheries resources by EKZN Wildlife is adding strain to their livelihoods because they need income sources to feed their families and take their children to school (SFFG 1; SFFG 2; SFFG 3; SFFG 4; MFFG 1; MFFG 2).

Due to pressures on livelihoods, it is apparent that what EKZN Wildlife believed is a benefit to fishers through co-management (i.e. legal rights of access and enhanced resource sustainability), is no longer satisfactory. Institutions and people may of course value benefits differently (Ribot and Peluso, 2003). An EKZN Wildlife official remarked that,

People in the committees no longer seem keen for joint management and no longer see benefits from it. They no longer see access to resources as a benefit anymore – they want more – they want bag limits to increase, they want to be paid, monitors want salary increases, etc. It has become glaringly evident that alternative livelihoods are important because people only fish because they are desperate and they can't make money (EKZNW 3).

It is therefore apparent from these findings that in the face of limited statehood and marginalization in rural communities, government needs to balance constraints presented by conservation rules with livelihood diversification opportunities in order make conservation meaningful in these contexts. Furthermore, government needs to focus on providing more alternative livelihood support options to rural coastal communities in order to enhance livelihood diversification options. Allison and Ellis (2001:383) confirm that “diversity is an important attribute of rural livelihoods in developing countries, and one that has tended to be ignored by policies that are sectorally based”. Allison and Ellis (2001) also point out that

diversification of rural livelihoods is pertinent as it reduces the risk of livelihood failure by increasing the pool of income sources for these communities. In addition, encouraging alternative livelihood options in rural coastal communities is important as it can limit their reliance on coastal resources (Allison and Ellis, 2001), maximize benefits from coastal resource use sectors and reduce pressures placed by local people on non-state actors and conservation authorities to play developmental roles.

7.6 Conclusion

The results of this study have shown that the decentralization of decision-making power by governments to downwardly accountable institutional structures at the local level enhances the robustness of benefit-sharing mechanisms. However, accountability and equity are key institutional factors that are needed to enhance the fairness of benefit-sharing processes in rural communities such as Sokhulu, Mbonambi and Mankosi, where institutional plurality at the local level plays a key role in determining people's ability to benefit. Because natural resource decision makers are faced with the task of allocating benefits (and costs), increased fairness of decisions and outcomes are significant as they increase the level of trust that people have in decision makers (Smith and McDonough, 2001). Furthermore, it is also apparent that government needs to play a role in providing basic services, providing alternative livelihood opportunities and supporting the local institutions that provide benefits which enhance the livelihoods of rural coastal communities in KwaZulu-Natal and Eastern Cape. This can help enhance livelihood diversification and reduce the reliance of the communities on coastal resources. Hence, Larson and Ribot (2004) assert that central governments have a responsibility to provide services to local communities, as well as guidelines and support to local institutions to ensure that marginalized communities benefit.

CHAPTER EIGHT – CONCLUSION AND RECOMMENDATIONS

The results of this study show that there are various ways in which rural coastal communities benefit from coastal resources. Rural coastal communities obtain social, ecological and economic benefits from the use of fisheries resources, as well as social and economic benefits from resource use in the mining sector. The institutions involved in using, controlling or regulating access to and benefits from resources in the fisheries and mining sectors have impacted significantly on people's ability to benefit from coastal resource use. Various mechanisms for benefit-sharing existed within the case study communities to distribute benefits from resource use, and were used by the institutions involved within the respective sectors to enhance benefits to local people. These mechanisms included partnerships by the state and/or private sector institutions with resource users in the communities, the setting up of local institutional arrangements, such as committees, for distributing benefits to the wider communities, as well as NGO involvement in local tourism, enhancing benefits to local fishers and wider communities.

The study has shown that limited involvement of the state in rural coastal communities in South Africa impacts negatively on the governance of natural resources and the distribution of benefits arising from their use. Although sectoral activities like fisheries and mining have brought about benefits to people in rural coastal communities of KwaZulu-Natal and the Eastern Cape, there are certain factors that have curtailed their positive impacts. These include national government's failure to resolve the issue of dual governance in rural communities, including the enforcement of a robust governance system. The lack of robust rural institutions for benefit distribution has led to a multiplicity of actors and institutions from diverse sectors working within rural communities, largely operating in isolation. Communities thus find it difficult to determine to whom they can assign blame for incurred losses. Institutional multiplicity and dual governance in these areas are also a central reason for communities being misinformed or uninformed by their leaders about their rights in terms of benefits, as well as about decision-making processes related to benefit distribution. This finding resonates with other studies which suggest that where there are multiple actors present in areas of 'limited statehood', it becomes impossible for people to hold certain actors responsible for bad governance or negative impacts incurred to communities (Schmelzle, 2007). This is an issue that needs to be taken into account by those seeking to develop institutional arrangements in rural communities that enhance benefits from natural resource use.

Moreover, the lack of robust rural governance systems has resulted in power struggles among those charged with distributing benefits to the wider communities. The power of local institutions plays a central role in determining who in the community benefits and why benefits are distributed in the manner that they are (Ribot and Peluso, 2003). The results of this study reveal that in rural coastal communities, economic benefits from high value coastal resources are highly contested by traditional authorities (TAs). Traditional Authorities tend to misuse their powers and absorb economic benefits aimed at wider communities, believing that that all community benefits should come to them. For instance, in KwaZulu-Natal, benefit-sharing from mining was largely hindered by the fact that TAs were unaccountable and used political patronage to determine who in the community should receive benefits. This was exacerbated by RBM's inadequate monitoring of the distribution of benefits by the TA to wider communities. In the Eastern Cape, benefits from tourism, also holding economic value, are similarly contested by TAs, and as a result have been blocked from reaching the wider community. The root cause of this elite capture is the failure of national government to clarify the roles of TAs in the democratic dispensation (Ntsebeza, 2002), and this has jeopardized rural development and the ability of rural communities to fully benefit from initiatives to improve livelihoods. In order to eliminate elite capture of benefits, the powers exerted by the institutions mediating access, use, control and benefits from natural resource use should be channeled in a manner that will empower rural communities and foster equitable benefit-sharing of resources.

The results of this study affirm that decentralized decision-making and increased participation of fishers in fisheries resource management are important for the more equitable management of resources and enhanced resource sustainability. Centralized or deconcentrated small-scale fisheries management has proved to be a failure in many countries around the world (Pomeroy and Berkes, 1997; Agrawal and Ribot, 1999). This study suggests that partnerships between state, non-state actors and local fishers may enhance benefits from resource use. However, devolved natural resource management is not enough. Management approaches need to give attention not only to the sustainability of resource use, but should also pay adequate attention to social and economic issues facing resource users. Increasingly, there is recognition that environmental governance systems such as co-management and other community-based approaches for managing natural resource use should not only be about resources, but also about the relationships between local communities and government actors

and the wider livelihood needs of communities (Nkhata and Breen, 2010). This is a sentiment strongly supported by the findings of this study.

Béné (2003) and Coulthard *et al* (2011) point out that the problem with many fisheries policy makers in developing countries is that they presume a link between small-scale fisheries and poverty, and thus make policies primarily upon that premise. It is argued that fisheries policy makers tend to focus on the fact that poor communities overfish and exhaust resource stocks because they are poor, without careful consideration of broader social and economic issues that affect how and why fishers fish. This assumption is increasingly under question due to the fact that fishing communities often rely on different income activities and assets apart from fishing, with some fishers poor and others not (Allison and Ellis, 2001; Béné, 2003). The findings of this study contribute to this argument by showing that fishing communities do not necessarily rely on fishing to support their livelihoods because of poverty alone, but because of poor alternative livelihood support options available to them. For instance, fishers involved in co-management in KwaZulu-Natal were unhappy about the constraints placed on their livelihoods by regulations, not because they do not care about resource sustainability, but because they lack alternative income sources or employment to support themselves when fishing seasons are closed or when their harvest is insufficient to meet household consumption needs. Alternative or diversified livelihood options are thus crucial for the resilience of fishing communities to decrease their reliance on fisheries resources (Allison and Ellis, 2001). Policy makers should take this into account as it may influence how communities respond to fisheries policies and laws, and their willingness to comply. Furthermore, decisions about resource management should not be made based on the fishers' impacts on resource stocks alone, without understanding the holistic and context-specific social and economic livelihood aspects of fishing communities that influence why they fish.

One of the main recommendations that could help enhance access and equitable benefit-sharing from coastal resource use in rural communities is to establish robust institutional arrangements for benefit-sharing. For instance, in small-scale fisheries in the Eastern Cape, national government needs to make provision for enhancing the participation of local people in decision-making processes. In KwaZulu-Natal, EKZN Wildlife needs to shift away from focusing primarily on resource sustainability in co-management, and towards enhanced understanding of the realities of the socio-economic aspects of fishers' livelihoods. Although it is not the mandate of fisheries and conservation authorities to provide alternative livelihood

opportunities to fishers, they could use their resources to help local government identify these options. Alternative livelihood options may provide for diversification, and potentially reduce reliance on coastal resources for survival. This may also increase the willingness of local communities to work with fisheries managers and to comply with resource use regulations.

Another recommendation is for provincial and local government to make sufficient efforts to provide basic service delivery in rural communities. This would enhance the ability of these communities to benefit from economic opportunities provided by different economic sectors. Practical ways should be found to foster the collaboration of various institutions present in rural areas, through local government IDPs, to maximize benefits from the sectors involved in natural resource use and management. This could help reduce people's reliance on coastal resources, and maximize opportunities for alternative socio-economic livelihood options. Government needs to provide full support to non-state actors such as NGOs which work at the local level to promote rural development, in order to enhance potential benefits to local people. The role of TAs at the local level needs to be clearly defined and a platform provided to allow democratically elected structures to represent local people, without the interference of TAs. Strengthening democracy in rural areas through the establishment of representative institutional structures is fundamental and can help promote human rights, development and the empowerment of rural communities.

Finally, but most importantly, it is critical that all government, private sector and NGO institutions operating in rural communities ensure that the arrangements they use to distribute benefits from different sectoral activities are efficient, reliable, downwardly accountable and representative of community, and not individual, interests. This may reduce community perceptions of loss from sectoral activities, and enhance equity in benefit distribution processes. This is a finding that resonates well with that of Ostrom (2005) who asserts that robust institutional arrangements for resource use and management are ones that promote fairness and the participation of affected individuals in decision-making processes. Furthermore, institutions working in rural communities should provide capacity building to local people to empower them to be informed about their rights and to participate in decision-making processes.

This study has provided an in-depth understanding of benefits from coastal resource use in the fisheries and mining sectors in rural communities. Coastal resources yield considerable social,

economic and ecological benefits to rural communities, and to other actors and institutions responsible for using or managing coastal resources. However, these benefits are paralleled by losses that are mostly incurred by communities. The mechanisms used by institutions that manage or that are involved in the use of coastal resources to distribute benefits from resource use to adjacent communities largely determine the extent and the manner in which wider communities benefit. Limited statehood, local power struggles among those charged with benefit distribution, elite capture of benefits, lack of accountability by local institutions, as well as centralized decision-making power by the state are key blockages to equitable benefit-sharing. The findings of this study thus affirm the need for robust, representative and downwardly accountable institutional arrangements for equitable benefit-sharing of coastal resources in rural communities.

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APPENDICES

APPENDIX 1: Household Questionnaire

Household Questionnaire Number-----

ANALYSIS OF BENEFITS FROM COASTAL RESOURCES AND MECHANISMS FOR EQUITABLE BENEFIT-SHARING IN SELECTED WIO COUNTRIES

HOUSEHOLD QUESTIONNAIRE

NOTE TO RESEARCHER

- [1] The respondent for this questionnaire must be a **RESOURCE USER** and does not necessarily need to be the head of the household;
- [2] **ALL** coastal resource use and benefits should be explored in this questionnaire
- [3] Introduce yourself to the respondent (name, surname, institution)
- [4] Ask the respondent if they wish to give you permission to use their identity or if they wish to remain anonymous
- [5] Inform the respondent that they do not have to answer a question if it would make them feel uncomfortable

PROJECT SUMMARY (please summarise to respondent):

The aim of this research is to develop an understanding of the use of coastal resources in the Western Indian Ocean region, and to explore the benefits derived from this use. A key objective of the project is to understand current initiatives and approaches that exist in coastal communities to encourage equitable benefit-sharing. Moreover, this project aims to identify the institutional structures and arrangements put in place within the community to enable benefit-sharing.

Date: _____
Interviewer's Name: _____
Respondent's Name: _____ (Optional)

1. BACKGROUND INFORMATION

1.1 Study Site Location

1. Region/Province _____
2. District _____
3. Village/Community /Locality _____
4. Name of Ward /Sub-Location _____

1.2 Respondent's Information

5. Gender [1] Male [2] Female

6. Age _____ (Give exact years)

7. Marital status of the respondent: [1] Single [2] Married [3] Divorced [4] Widow [5] Separated [6] Widower

8. Level of education of respondent.

- [1] No formal Education
- [2] Incomplete primary education [between Gr.1 and Gr.4]
- [3] Complete Primary education [finished Gr.5]
- [6] Incomplete High School Education [between Gr. 6 and Gr.11]
- [7] Complete High school Education [finished Gr. 12]
- [8] Technical/ College Education
- [9] University Education

9. Occupation of Respondent

[1] Employed

[1b] If employed (please state) _____

[2] Self-employed

[2b] If self-employed (please state - e.g. Farmer, livestock keeper, agro-pastoral, fisher, taxi driver, shop owner, trader etc) _____

[3] Unemployed

[4] Pensioner

[4b] If a Pensioner, please state former occupation _____

[5] School-going learner

[6] Other (please state) _____

10. Where were you born?

1. In this village
2. In different village within the district
3. Outside the District but within the Region/Province
4. Outside the Region/Province
5. Outside the Country

11. For how long have you lived in this village _____ (Mention years)

12. If you migrated to this village/community/locality, mention the reason (s) for migrating

1.3 Observation

13. How many HOUSES are there in your homestead/Compound? _____.

14. How many HOUSEHOLDS live in your homestead/Compound? _____

15. What is the total number of rooms in the MAIN dwelling? _____

16. What is the MAIN material used for the walls and roof of the MAIN dwelling? Observe and tick only one for each.

7. WALLS (tick one)			8. ROOF (tick one)	
Traditional dwelling (mud brick, clay, dung, wattle)			Thatch	
Temporary shack (plastic, cardboard, plywood)			Corrugated iron	
Permanent shack (corrugated iron, mixed brick)			Tiles	
Permanent house (brick, block)				
Other (specify)				

1.4 Household Characteristics and Income

17. How many people live in your household/homestead? _____

18. How many adults, older than 18, live in your household/homestead? _____

19. How many people, younger than 18, live in your household/homestead? _____

20. Are you the household/homestead head? [1] Yes or [2] No _____

21. If No, what is your relation to the Head of Household? _____

22. What is the occupation of the head of your household/homestead?

[1] Employed

[1b] If employed (please state) _____

[2] Self-employed

[2b] If self-employed (please state - e.g. Farmer, livestock keeper, agro-pastoral, fisher, taxi driver, shop owner, trader etc) _____

[3] Unemployed

[4] Pensioner _____

[4b] If a Pensioner, please state former occupation _____

[5] School-going learner

[6] Other (please state) _____

23. What is the range of your household monthly income (pensions, grants, other sources of income included?) [*Ask range and not specific amount*]

South Africa	Tanzania
[1] Less than R1000	[1] <150,000
[2] R1001-R1700	[2] 150,001-300,000/=
[3] R1701-R3000	[3] 300,001- 500,000/=
[4] R3001-R7500	[4] 500,001-1,000,000/=
[5] R7501 or more	[5] 1,000,001-3,000,000/=
	[6] >3,000,000/=

24. What present activities contribute towards your monthly income? Circle **ALL** that are applicable and go through each.

- [1] The sale of marine resources
- [2] Sale of crops (fruit, vegetables)
- [3] Sale of livestock (poultry etc)
- [4] Sale of wood
- [5] Employment in tourism industry (state type of work) _____
- [6] Employment in forestry industry (state type of work) _____
- [7] Employment in agriculture (state type of work) _____
- [8] Employment in fishing industry (state type of work) _____
- [9] Employment in mining industry (state type of work) _____
- [10] Employment in other activities (please state) _____
- [11] Pension
- [12] Grants (please specify: ie: disability, child) _____
- [13] Others (please specify) _____

25. **RANK** the **THREE** most important activities in terms of monthly income (1=most important)? (Add notes where relevant)

- [1] The sale of marine resources
- [2] Sale of crops (fruit, vegetables)
- [3] Sale of livestock (poultry etc)
- [4] Sale of wood
- [5] Employment in tourism industry _____
- [6] Employment in forestry industry _____
- [7] Employment in agriculture _____
- [8] Employment in fishing industry _____
- [9] Employment in mining industry _____
- [10] Employment in other activities (please state) _____
- [11] Pension
- [12] Grants (please specify: ie: disability, child) _____
- [13] Others (please specify) _____

26. Is your household connected to an electricity supply?

- [1] Yes [2] No

27. What is the source of energy for cooking in your household? [Tick all that apply]

- a. Electricity
- b. Solar power
- c. Charcoal
- d. Kerosene
- e. LPG gas
- f. Biogas
- g. Firewood
- h. Other sources (specify) _____

28. What is the most often used source of **DRINKING** water in your household? [Tick all that apply]

[1] Piped/tap water inside household/homestead

[2] Piped – Single tap in yard

[3] Piped – public stand post

[4] Hand pump well (Borehole with hand pump, shallow well fitted with pump)

[5] Rainwater tank

[6] Collect water from flowing river/stream

[7] A constructed Dam with outlet for fetching water

[8] Stagnant water (ponding water, natural/traditional pool, swamp, dug out pits/holes)

[9] Open unprotected well (traditional well)

[10] Open but lined well with a container for lifting water

[11] Others sources (specify): _____

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2. RESOURCE USE

2.1 Consumptive Resource Use

29. What are the natural resources that you use? Please State		30. Tick the THREE most important resources for you and your family	31. For how long have you been harvesting this resource (in years)?	32. Do you have a permit or license to harvest coastal resources? 1) Yes 2) No (Give code)	33. Over the past 10 years, has the resource become M =More, L =Less or S =Stayed the same? (give code)	34. Have there been any changes in the way you have accessed or benefited from this resource? 1) Yes 2) No	34a. If there have been any changes in the way you have accessed or benefited from this resource, state, how so?	35. Do you use the resource A=All year, S=During specific seasons, O=Occasionally? (give code)	36. What is the resource used for? (Please state)	37. What do you do with the resource that you harvest? Indicate Yes or No and indicate percentage if possible If you Sell, please indicate to whom you sell to – ie. Neighbour, community buyer, outside buyer etc.		
Natural resources that you use	State name of resource used									Own use	Sell (Please state to whom)	Give away
Marine Resources												
Forest Products												
Minerals												
Agriculture												
Sand												
Wildlife												

3. BENEFITS FROM THE USE OF COASTAL RESOURCES

38. List the resources that you harvest-as mentioned above-and explain how your life benefits from this use

RESOURCE	HOW YOUR LIFE BENEFITS

39. Have any of these activities/sectors had a negative impact on your life?

Sector	Yes	No	If yes, explain why and/or how
Marine resource harvesting			
Forest products harvesting			
Mining			
Agriculture			
Tourism			
Conservation			
Other (specify)			

4. UNDERSTANDING EXISTING INSTITUTIONAL ARRANGEMENTS FOR BENEFIT-SHARING OF COASTAL RESOURCES.

Coastal resources	40. Is there a local committee or group who makes decisions about resource use and access?			41. If YES, do you participate in this committee or group?			42. If YES, do you think this committee or group fairly represents the people who use coastal resources?		
	Yes	No	Don't Know	Yes	No	Don't Know	Yes	No	Don't Know
Marine									
Forestry									
Mining									
Agriculture									
Tourism									
Conservation									
Other									

5. Understanding Stakeholders in Decision-making

Sector	43. In each sector, which stakeholder do you think is MOST POWERFUL in making decisions (i.e.: 1. individual, 2. community group, 3. traditional authority, 4. village government 5. local /provincial, 6. central government, etc)	44. Why is this so?
Fisheries		
Forestry		
Mining		
Agriculture		
Tourism		
Conservation		
Other		

6. GOVERNMENT AND LOCAL RULES

Answer the following questions for the resources that the respondent uses (please tick the appropriate answer)

Specify the resource	45. Are there government rules in place that outline how people should use resources?			46. Do you think these rules are fair?				47. Do local people keep to (comply with) these rules?				48. Are there other (traditional) rules that are used?				
	Yes	No	Don't know	Yes always	Yes, Sometimes	No	Don't know	Yes Always	Yes Sometimes	No	Don't know	Yes Always	Yes, Sometimes	No	Don't know	
Marine																
Forestry																
Mining																
Agriculture																
Others																

Please elaborate on the above where relevant (e.g. mentioning the rules).

7. SITE SPECIFIC QUESTIONS RELEVANT TO EACH CASE STUDY SITE and EACH BENEFIT-SHARING ARRANGEMENT [left column to be inserted with relevant benefit-sharing mechanisms for each case study site]

Case study specific benefit-sharing mechanisms	49. Are you aware of these activities in your area? 1. YES 2. NO	50. Are you involved in these activities? 1. YES 2. NO.	51. If you are involved in these activities, indicate how?	52. Do you benefit from these activities? 1. YES 2. NO	53. If you benefit, are you SATISFIED with how you are benefiting? 1. YES 2. NO	54. If you are NOT satisfied, how could your benefits be improved? Please state.	55. What strategies need to be implemented to enhance benefits and benefit-sharing	56. Are there any specific issues you would like to raise in association with this?

THANK YOU FOR YOUR COOPERATION

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APPENDIX 2: Household survey sampling calculations

- a) Simple random sampling: The formula used from Yamane (1967:98) to determine the sample size for the Mankosi case study household surveys takes into account precision and reliability. Hence the formula is as follows

$$n = Nz^2 pq / Nd^2 + z^2 pq \quad (\text{without replacement})$$

Here, n (represents the total sample size), z (represents the normal sampling distribution-where $z = 2$ indicates a 95% confidence interval), p (represents the estimated proportion of behavior in the population-where 0.5 or 50% represents complete uncertainty) and q (represents $1/p$).

*Calculation

$$n = Nz^2 pq / Nd^2 + z^2 pq$$

$$n = 800 (2)^2 (0.5)(0.5) / 800 (0.11)^2 + (2)^2 (0.5)(0.5)$$

$$n = 800 / 10.68$$

$$n = 75$$

As a result of the above calculation, the total sample size for Mankosi was determined to be 75 homesteads, which were rounded off to the nearest 10 to give a total of 80 homesteads that were surveyed. The research timeframes and budget were taken into account in determining the sample size and desired variance of the sample size.

- b) Stratified random sampling: The formula from Yamane (1967:154) for determining samples sizes for proportion allocation was used to determine the sample sizes of homesteads for the household surveys in Sokhulu and Mbonambi. The formula is as stated below:

$$n = N \sum N_n P_n Q_n / N^2 D^2 + \sum$$

Here n (represents the total number of homesteads), N (represents the total number of homesteads in Sokhulu and Mbonambi, respectively), P (represents the estimated proportion of behavior in each community group), Q (represents $1/p$) and D (represents the desired variance, i.e. determining the precision of estimates).

*Calculation

$$n = N \sum N_n P_n Q_n / N^2 D^2 + \sum$$

$$n = 3036(540 \times 0.5 \times 0.5 + 2494 \times 0.5 \times 0.5) / 3036^2 (0.035)^2 + 540 \times 0.5 \times 0.5 + 2494 \times 0.5 \times 0.5$$

$$n = 2302806 / 45923.2504$$

$$n = 191$$

Therefore, 191 is the total sample size of homesteads from Sokhulu and Mbonambi, which was rounded off to the nearest 10 to equal 190 homesteads.

$$\text{Sample size for Ward 1 (Sokhulu)} = 540 / 3036 * 190 = 34$$

$$\text{Sample size for Ward 3 (Sokhulu and Mbonambi)} = 2494 / 3036 * 190 = 156$$

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APPENDIX 3: Sokhulu, Mbonambi and Mankosi focus group template and focus group schedules

Introductions

Exercise 1: Defining benefits

*Note – This was the first exercise that took place in this focus group and it was a brainstorming exercise where the participants were asked to discuss what they perceived to be tangible or intangible benefits they obtain from participating in subsistence fisheries in their area. This exercise was done so that all the participants would have a common understanding of what is meant by the term ‘benefits’ and they were encouraged to give examples of what they define as benefits. Smiley face icons (☺) were used to rank the impact of each benefit. If the benefit had a very positive impact on people’s lives, it got a ranking of three smiley faces. If the impact of a benefit was moderately positive, it got a ranking of two smiley faces. Lastly, if the impact of a benefit was slightly positive, it got a ranking of one smiley face. In the same way, frowning face icons (☹) were also used to indicate rankings of negative impacts (i.e. three frowning faces indicated a very negative impact, two frowning faces indicated a moderately negative impact and one frowning face represented a slightly negative impact).

Exercise 2: Timeline

*Note – The timeline was the second exercise that was conducted during this focus group meeting. A timeline is a participatory rural appraisal (PRA) technique that is used to assess the impacts of particular events to people over a certain time period. In this focus group meeting, the timeline was conducted in order to understand the various interventions or events that have taken place at Sokhulu since the start of coastal resource conservation practices (i.e. since 1984) to date. The timeline was intended to reveal the benefits and losses that were incurred by the people of Sokhulu because of the particular events or interventions, as discussed by the participants. In addition, the focus group participants were asked to rank each event on the timeline in order to indicate the extent of the impact of that particular event on their lives. Smiley face icons (☺) and frowning face icons (☹) were used to rank the impact of each event on the lives of the participants.

Below is the timeline of the different events or interventions that have taken place since 1984 and the responses of the focus group participants on how these events or interventions positively or negatively impacted their lives.

Exercise 3: Ranking of decision-making stakeholders in intertidal resource harvesting at Sokhulu and power ranking

*Note – In this exercise, the participants were asked to list and rank all the stakeholders in mussel harvesting at Sokhulu and rank them according to who has the most decision-making power. Ranking starts from the number 1, with the stakeholder with the most decision-making power gets a ranking of 1, followed by 2, and so on.

Below are the stakeholders mentioned by the focus group participants and how they were ranked according to decision-making power.

Exercise 4: Venn Diagram

*Note – A Venn diagram is another PRA technique that is used to understand the significance of actors in a given network and to depict the relationships that exist among those actors. In this case, the Venn diagram is used to understand who the different stakeholders involved in subsistence fisheries at Sokhulu are and what relationships exist among them. The circle sizes depict the amount of decision-making power, i.e. the bigger the circle, the bigger the decision-making powers of an actor. Colour of the circles represents nothing in particular. Proximity of circles to and from each other depicts the relationship between the stakeholders represented in each circle, i.e. the closer the circles to each other, the stronger the relationship represented, the further the circles from each other, the weaker the relationship depicted.

Sokhulu focus group schedule²⁰

DATE	FOCUS GROUP	CODE	PARTICIPANTS
08 February 2010	Sokhulu fisheries focus group 1 – Mussel Committee	SFFG 1	11 members (including committee chairperson, treasurer and monitors)
08 February 2010	Sokhulu fisheries focus group 2 – Line Fish Committee	SFFG 2	8 members (including committee chairperson, deputy chairperson and secretary)
09 February 2010	Sokhulu fisheries focus group 3 – Mussel harvesters	SFFG3	13 mussel harvesters
09 February 2010	Sokhulu fisheries focus group 4 – Sokhulu fishermen	SFFG4	7 fishermen
11 February 2010	Sokhulu mining focus group 1 - Sokhulu Youth Development Committee	SMFG 1	7 members (including chairperson, deputy chairperson, and deputy secretary)
11 February 2010	Sokhulu traditional healers	SHFG	3 healers
23 February 2010	Sokhulu mining focus group 2 - Sokhulu mining employees	SMFG 2	7 mining workers (3 work at RBM, 4 work for RBM contractors)

²⁰ In Sokhulu, seven focus group meetings were conducted, and there were 56 participants in total.

Mbonambi focus group schedule²¹

DATE	FOCUS GROUP	CODE	PARTICIPANTS
12 February 2010	Mbonambi Community Trust	MMFG 1	3 members (i.e. chairperson, treasurer and co-ordinator)
16 February 2010	Mbonambi fisheries focus group 1 – Line Fish Committee	MFFG 1	7 members (including committee chairperson, deputy chairperson and monitors)
16 February 2010	Mbonambi fisheries focus group 2 – Mbonambi fishermen	MFFG 2	5 fishermen
17 February 2010	Mbonambi fisheries focus group 3 – Mussel collectors/farmers	MFFG3	51 mussel collectors/farmers
19 February 2010	Mbonambi traditional healers	MHFG	5 healers and 3 community members
19 February 2010	Mbonambi mining focus group – Mbonambi mining employees	MMFG 2	5 mining workers

Mankosi focus group schedule²²

DATE	FOCUS GROUP	CODE	PARTICIPANTS
17 November 2009	Mankosi fisheries focus group 1 – Line Fish Committee	MFFG 1	10 members (including chairperson, treasurer, secretary and monitors)
17 November 2009	Mankosi fisheries focus group 2 – Female fishers	MFFG 2	23 female fishers (i.e. mainly intertidal resources)
18 November 2009	Mankosi traditional healers	MHFG	7 healers
19 November 2009	Mankosi tourism focus group – Tourism entrepreneurs	MTFG	20 participants
19 November 2009	Mankosi Community Trust	MCTFG	4 members (i.e. secretary, deputy chairperson, administrator and vice secretary)
20 November 2009	Mankosi fisheries focus group 3 – Male fishers	MFFG 3	10 fishermen and divers

²¹ In Mbonambi, six focus group meetings were conducted, and there were 76 participants in total.

²² In Mankosi, six focus group meetings were conducted for this study, and there were 74 participants in total.

APPENDIX 4: KwaZulu-Natal key informant interviews and interview schedule

RBM representatives interview template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, mining, forestry).

1. What is your role in relation to community engagement and ensuring that communities benefit from mining?
 - 2.
 3. What is RBM's strategy in terms of benefit-sharing? What is the institutional arrangement that is used by RBM to enable the communities of Sokhulu and Mbonambi to benefit from mining activities?
 4. What are the benefits that the Sokhulu and Mbonambi communities obtain from RBM mining activities?
 5. What is the current status of the RBM BBBEE transaction endowments that were set to be given to Mbonambi and Sokhulu (R17.5 million)?
.
 6. What is the relationship between RBM and tribal authorities?
 7. Can you explain the court case between RBM and Mbonambi. Was it resolved?
.
 8. Who in the communities are benefiting from RBM's interventions, and how are they benefiting? What are the losses that the communities have experienced as a result of mining activities?
 9. How does the Department of Forestry make decisions about the rehabilitation of mining land and the land-use/forest type used? When was the decision taken to plant 2/3 casuarina and 1/3 indigenous forest in areas mined by RBM? And why? Has this decision ever been revisited? What has been the role of RBM in this decision? What are the ecological impacts of casuarinas?
 10. List the people/organisations/institutions that you work with in relation to communities that are affected by mining activities.
 11. Rank these people/organisations/institutions according to who you think have the most decision-making power in ensuring benefits to local communities.
-

KZN Regional Forestry representative template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, mining, forestry).

1. What is your role in relation to forestry management and conservation?
2. What benefits do Sokhulu and Mbonambi communities derive from the forestry sector and forest resources? Have they experienced any losses in relation to forest resources?
3. Has the development of commercial forestry at Sokhulu and Mbonambi over the years changed the way in which these communities access the coast and its resources? If yes, how so?
4. Who has the right to access :
 - (a) Indigenous forests in the KZN coast, particularly at Sokhulu and Mbonambi?
 - (b) Commercial forests at Sokhulu and Mbonambi?
5. How is access and benefit-sharing *facilitated* in terms of policy and law in the province? What are the *blockages*?
6. Are you aware of specific forestry cases where there are positive or negative examples of equitable benefit-sharing? Why are these considered positive or negative?
7. Who determines access rights for the indigenous and commercial forests respectively? How are the rights allocated?
8. What is the relationship between KZN Regional Forestry and companies such as Siyaqhubeka, Z.G. Forestry, Mondi and Sappi that operate at the community level? Are there any institutional arrangements that facilitate this affiliation?
9. How do small-scale timber growers, such as gumtree growers at Sokhulu and Mbonambi, access commercial markets? What mechanisms facilitate this?
10. What is the relationship between mining activities and forestry at Sokhulu and Mbonambi?
11. What is your knowledge of the forest conversion to sugarcane proposed by RBM for the Sokhulu-Mthunzini forest?
12. What are the ecological impacts of forestry activities at
 - (a) Sokhulu and
 - (b) Mbonambi
13. How does the Department of Forestry make decisions about the rehabilitation of mining land and the land-use/forest type used? When was the decision taken to plant 2/3 casuarina and 1/3 indigenous forest in areas mined by RBM? And why? Has this decision ever been revisited? What has been the role of RBM in this decision? What are the ecological impacts of casuarinas? and gum and other plantations?

14. Can you explain ownership of land by the Department of Forestry in the area of Sokhulu and Mbonambi and how this may change with the land claim? How will this impact the community?
 15. List the people/organisations/institutions that you work with that take decisions in relation to forestry use and access in KZN.
 16. Rank these people/organisations/institutions according to who you think have the most decision-making power in managing the use and access of forest resources in KZN.
-

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KZN Regional Land Claims Commission representative (LCCKI 1)

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, mining, forestry).

1. What is your role in relation to the management of land and land issues in KwaZulu-Natal?
2. Can you explain ownership of land by the forestry, mining and conservation sectors as well as the tribal authorities in the area of Sokhulu and Mbonambi. How will this change with the land claim made by Sokhulu and Mbonambi communities? How will this impact the communities?
3. What is the current status of the land claims by Sokhulu and Mbonambi? Have the title deeds been issued? (*request any documentation for this)
4. Who is benefiting from coastal land and its resources (in different sectors) and how? Who is losing and how? FOCUS ON CASE STUDY AREA IF POSSIBLE
5. List the people/organisations/institutions that you work with that take decisions in relation to coastal resource use and access in KZN.
6. Rank these people/organisations/institutions according to who you think have the most decision-making power in managing the use and access of coastal resources in KZN.

Sokhulu and Mbonambi local key informants' template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, mining, forestry).

Questions to be asked:

1. What is your role in the community in relation to coastal resource management and conservation?
2. Describe your relationship with the traditional authority in the Sokhulu community.
3. How is the traditional authority affiliated with government structures like the local and district municipalities?
4. How is the Tribal Authority chosen?
5. Do you think that the Tribal Authority fairly represents the community and their needs?
6. What benefits does the Sokhulu community derive from:
 - a. Commercial forestry
 - b. Indigenous forests
 - c. Mining
 - d. Mapelane Nature Reserve
 - e. Tourism
 - f. Fisheries
7. What losses (or negative impacts) have resulted in the Sokhulu community from:
 - a. Commercial forestry
 - b. Indigenous forests
 - c. Mining
 - d. Mapelane Nature Reserve
 - e. Tourism
 - f. Fisheries
8. Who has the right to access resources in these different sectors? How are the rights allocated?
 - a. Commercial forestry
 - b. Indigenous forests
 - c. Mining
 - d. Mapelane Nature Reserve
 - e. Tourism
 - f. Fisheries
9. Can you explain ownership of land in the area of Sokhulu and how this may change with the land claim? How will this impact the community?
10. How is access and benefit-sharing *facilitated* in terms of policy and law? What are the *blockages*?
11. List the people/organisations/institutions that you work with that take decisions in relation to coastal resource use and access in Sokhulu.

12. Rank these people/organisations/institutions according to who you think have the most decision-making power in managing the use and access of coastal resources in Sokhulu.
-

EKZN Wildlife and conservation authority representatives interview template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, mining, forestry).

1. What is your role in relation to fisheries management and conservation?
2. Has the development of co-management arrangements at Sokhulu and Mbonambi over the years changed the way in which these communities access the coast and its resources? If yes, how so?
3. Who has the right to access fisheries resources (intertidal and linefish) in the Sokhulu and Mbonambi communities? Who allocates this right?
4. Are there any conflicts of access between recreational and subsistence fishers along the coasts of Sokhulu and Mbonambi? Explain.
5. How is access and benefit-sharing *facilitated* in terms of policy and law? What are the *blockages*?
6. The Sokhulu mussel harvesting project is a well documented case of benefit-sharing.
 - a. Why was this project initiated? What were the drivers?
 - b. What have been the benefits? Who has benefited?
 - c. Have there been any losses? If so, by whom?
 - d. What have been the key challenges related to this project?
 - e. What have been the ecological impacts?
7. Why has a similar mussel project not been initiated in the community of Mbonambi? What has been the impact of this on the community?
8. Explain the initiatives that have been set up for the co-management of linefisheries in Sokhulu and Mbonambi.
 - a. Why was co-management initiated? What were the drivers?
 - b. What have been the benefits? Who has benefited?
 - c. Have there been any losses? If so, by whom?
 - d. What have been the key challenges?
 - e. What have been the ecological impacts?
9. What benefits do the Sokhulu and Mbonambi communities (respectively) receive from:
 - a. Mapelane Nature Reserve
 - b. Tourism
 - c. Forestry conservation
10. What losses do the Sokhulu and Mbonambi communities (respectively) receive from:
 - a. Mapelane Nature Reserve
 - b. Tourism
 - c. Forestry conservation
11. Can you explain ownership of land in the area of Sokhulu and Mbonambi and how this may change with the land claim? How will this impact the community?
12. List the people/organisations/institutions that you work with that take decisions in relation to marine resource use and access in KZN.

13. Rank these people/organisations/institutions according to who you think have the most decision-making power in managing the use and access of marine resources in KZN.

*Other questions will need to be devised in a similar fashion for Terence for example (manager of Maphelane – tourism/conservation) and other key people in area not necessarily related to fisheries).

ACLME tourism representative interview template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, forestry).

Questions to be asked:

1. What is/has been your involvement in relation to tourism along the coast of South Africa, and other areas of Africa? Have you been involved in any activities that explore community benefits in relation to tourism?
2. In your experience, have communities living adjacent to tourism ventures/initiatives benefitted in any way? If yes, what have some of these benefits been?
3. Can you give positive and negative examples of tourism initiatives that have impacted on communities? Why are these examples positive or negative? What have been the benefits and what have been the losses to communities in these examples (or case studies?).
4. Are there tourism initiatives that you know of that intend at the outset to involve and benefit the communities that they operate next to? What drives these particular tourism initiatives? Give examples if possible.
5. How can tourism facilitate access and benefit-sharing for local communities? What are the challenges?
6. Who are the main beneficiaries of tourism initiatives and what factors determine how these benefits are distributed?
7. What are the benefits that the rural coastal communities get from tourism related activities?
8. How is access and benefit-sharing in the tourism industry *facilitated* in terms of policy and law? What are the *blockages*?
9. Rank these people/organisations/institutions according to who you think have the most decision-making power in ensuring benefits to the local community.
10. Are there any other key people in the tourism arena that have knowledge of community impacts/involvement in tourism initiatives that you think I should speak to? Can you recommend any key papers or reports that you think are key for me to read to gain a better understanding of these issues?

KwaZulu-Natal key informant interview schedule²³

²³ In Sokhulu and Mbonambi, 17 key informant interviews were conducted for this study.

DATE	KEY INFORMANT	CODE	INSTITUTION/ORGANIZATION
11 February 2010	RBM representative 1	RBM 1	RBM
25 February 2010	RBM representative 2	RBM 2	RBM
25 February 2010	RBM representative 3	RBM 3	RBM
26 February 2010	KZN Regional Forestry representative	DWAF 1	DWAF
26 February 2010	KZN Regional Land Claims Commission representative	LCCKI	DRDLR
23 February 2010	EKZN Wildlife representative 1	EKZNW 1	EKZN Wildlife
25 February 2010	EKZN Wildlife representative 2	EKZNW 2	EKZN Wildlife
26 February 2010	EKZN Wildlife representative 3	EKZNW 3	EKZN Wildlife
31 October 2009	EKZN Wildlife representative 4	EKZNW 4	EKZN Wildlife
25 February 2010	Mbonambi Ward 3 Councillor	MKI 1	Mfolozi Local Municipality
01 March 2010	Sokhulu Ward 1 Councillor	SKI 1	Mfolozi Local Municipality
24 February 2010	Mbonambi Traditional Authority representative	MKI 2	Mbonambi Traditional Authority
27 February 2010	Sokhulu Traditional Authority representative	SKI 2	Sokhulu Traditional Authority
03 March 2010	Mfolozi Local Municipality representative	MLM	Mfolozi Local Municipality
02 June 2010	ASCLME Tourism representative	TKI	ASCLME
03 June 2010	EKZN Wildlife representative	EKZNW 5	EKZN Wildlife
04 June 2010	iSimangaliso Authority representative	IAKI	iSimangaliso Authority

APPENDIX 5: Eastern Cape key informant interview template and interview schedule

Government department representatives interview template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, forestry).

Questions to be asked:

1. What is your role in terms of coastal zone management within Eastern Cape?
2. What are the institutional arrangements for coastal management in the Eastern Cape coast – and how do they fit into provincial and national level institutions?
3. Who is benefiting from coastal resources (in different sectors) and how? Who is losing and how? FOCUS ON CASE STUDY AREA IF POSSIBLE
4. How is access and benefit-sharing *facilitated* in terms of policy and law in the province? What are the *blockages* preventing access to resources and equitable benefit-sharing?
5. Are you aware of specific cases where there are positive or negative examples of equitable benefit-sharing? Why are these considered positive or negative?
6. List the people/organisations/institutions that you work with that take decisions in relation to coastal resource use and access in Eastern Cape.
7. Rank these people/organisations/institutions according to who you think have the most decision-making power in managing the use and access of coastal resources in Eastern Cape.

Mankosi local key informants interview template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, forestry).

Questions to be asked:

1. What is your role in the community in relation to coastal resource management and conservation?
2. Describe your relationship with the local councillor in the Mankosi community.
3. How is the traditional authority affiliated with government structures like the local and district municipalities?
4. Do you think that the Mankosi councillor fairly represents the community and their needs?
5. Do you think the Mankosi Chief fairly represents the community and their needs?
6. Do you think the Mankosi traditional authority fairly represents the community and their needs?
7. What benefits does the Mankosi community derive from:
 - a. Indigenous forests
 - b. Tourism
 - c. Agriculture
 - d. Conservation
 - e. Fisheries
8. What losses (or negative impacts) have resulted in the Mankosi community from:
 - a. Indigenous forests
 - b. Tourism
 - c. Agriculture
 - d. Conservation
 - e. Fisheries
9. Who has the right to access resources in these different sectors? How are the rights allocated
 - a. Indigenous forests
 - b. Tourism
 - c. Agriculture
 - d. Conservation
 - e. Fisheries
10. What is the institutional arrangements put in place for external stakeholders to work with the community, i.e.
 - a. Commercial fisheries resources buyer e.g. lobster buyer
 - b. Coast Care managers
 - c. Other?
11. Can you explain ownership of land in the area of Mankosi?

12. How is access and benefit-sharing *facilitated* in terms of policy and law? What are the *blockages*?
13. List the people/organisations/institutions that you work with that take decisions in relation to coastal resource use and access in Mankosi.
14. Rank these people/organisations/institutions according to who you think have the most decision-making power in managing the use and access of coastal resources in Mankosi.

University of Cape Town

Tourism key informants interview template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, forestry).

Questions to be asked:

1. What is your role in relation to community engagement and ensuring that communities benefit from tourism?
2. What is your role in Mankosi tourism?
3. Based on your experiences, what facilitated and what has obstructed benefit-sharing in the community in relation to your activities?
4. How would you describe the relationship between the your facility and
 - a. Mankosi traditional authority
 - b. Mankosi Chief
 - c. Mankosi Community Trust
 - d. Nyandeni Local Municipality
 - e. Mankosi Councillor
 - f. Anchorage hotel
5. What is your strategy in terms of benefit-sharing? What is the institutional arrangement that you use to enable the community of Mankosi to benefit from tourism and other activities?
6. What are the benefits and losses that the Mankosi community gets from tourism activities?
7. How are benefits distributed (ie: who takes these decisions on how and who and how much?)
8. How is access and benefit-sharing *facilitated* in terms of policy and law? What are the *blockages*?
9. List the people/organisations/institutions that you work with in relation to communities that are affected by tourism activities.
10. Rank these people/organisations/institutions according to who you think have the most decision-making power in ensuring benefits to Mankosi.

Commercial lobster buyer interview template

Researchers explain the project and its focus on different sectors (tourism, conservation, fisheries, forestry).

Questions to be asked:

1. What is your role in relation to fisheries resource use in the Mankosi coast?
2. Has the way in which people in Mankosi access fisheries resources over the years changed? If yes, how so?
3. Who has the right to access shellfish resources in the Mankosi coast? Who allocates this right?
4. Describe your relationship with local Mankosi fishermen and fisheries resources harvesters?
5. What is your relationship with external commercial buyers of fisheries resources?
6. What institutional arrangement is in place in order for you to liaise with fishers in the community?
7. Are there any conflicts of access between large scale commercial fishers and small-scale fishers along the coasts of Mankosi? Explain.
8. How is access and benefit-sharing *facilitated* in terms of policy and law? What are the *blockages*?
9. Is the current model for buying lobster from permit holders economically viable for your company for the long term?
10. What is the good way to market lobster on the local and regional market?
11. List the people/organisations/institutions that you work with that take decisions in relation to marine resource use and access in Eastern Cape.
12. Rank these people/organisations/institutions according to who you think have the most decision-making power in managing the use and access of marine resources in Eastern Cape.

Eastern Cape key informant interview schedule²⁴

DATE	KEY INFORMANT	CODE	INSTITUTION/ORGANIZATION
27 May 2010	DEDEA representative	ECKI 1	DEDEA
27 May 2010	Eastern Cape Tourism Board representative	ECKI 2	Eastern Cape Tourism Board
28 May 2010	DRDLR representative	ECKI 3	DRDLR
27 May 2010	O.R. Tambo District Municipality representative	ORKI	O.R. Tambo District Municipality
28 May 2010	Nyandeni Local Municipality representative	NLMKI	Nyandeni Local Municipality
22 May 2010	Nyandeni Ward 26 Councilor	MKI 1	Nyandeni Local Municipality
21 May 2010	Mankosi traditional authority representative	MKI 2	Mankosi Traditional Authority
21 May 2010	Mankosi Community Trust representative	MKI 3	Mankosi Community Trust
21 May 2010	TransCape and Nyandeni Local Tourism Board representative	MKI 4	TransCape
22 May 2010	Anchorage Hotel representative	MKI 5	Anchorage Hotel
26 May 2010	Coffee Bay mussel project representative	CBMP	-
25 May 2010	Commercial lobster buyer	CLB	Phumalali seafood

²⁴ In Mankosi, eight key informant interviews were conducted for this study.